The Overseas Trade of Bristol in the Seventeenth Century

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79,413 words.

Abstract

Witnessing the shift from the medieval world based on trade with Europe's Atlantic coast to a new system encompassing the American colonies, the seventeenth century was a pivotal period in Bristol's commercial history. It has, however, received relatively little attention from modern historians. What work has been done has either focused on qualitative sources, or merely sampled the statistical evidence. This thesis, therefore, represents the first in-depth statistical study of Bristol's seventeenth-century trade. Based on a detailed examination of the surviving Port Books and Wharfage Books, it challenges many previous views. The first half of the thesis examines Bristol's trade in the late sixteenth and early seventeenth centuries, showing that, rather than being a 'dark epoch', these years were a time of commercial prosperity for Bristol. Trade with the city's existing markets is shown to have expanded significantly, as a result of both a diverse supply of exports and consumer demand for a range of imported wares. The later chapters provide the first detailed account of the emergence of Bristol's American trades. This shows that they developed faster and earlier than has previously been thought, questioning the assumption that Bristol's commercial success in the Americas trade depended on the slave trade. The principal driving force of the seventeenth-century expansion is shown to have been the growing colonial population's demand for English manufactures, and the rising domestic appetite for ever-cheaper supplies of sugar and tobacco. Finally, Bristol's involvement in other branches of trade in the latter-seventeenth century is examined. This chapter charts the mixed fortunes of the city's traditional trades, as well as the reluctance of Bristol's merchants to exploit opportunities beyond the Atlantic.

I declare that the work in this dissertation was carried out in accordance with the Regulations of the University of Bristol. The work is original, except where indicated by special reference in the text, and no part of the dissertation has been submitted for any other academic award. Any views expressed in the dissertation are those of the author:

SIGNED: ..... DATE: 23/01/13

For my family.

Acknowledgments

Obviously the debts accumulated during four years of research are too numerous to recount in full here, but it goes without saying that I am deeply grateful to all who have contributed to this thesis in some way or another. In particular I must thank the AHRC, whose scholarship supported me through my second and third years of research. For funding during my first year, I am also obliged to BIRTHA and Quentin Skinner, as well as Charles and Gladys Mytton. Naturally my supervisor Evan Jones has played a huge part in the shaping of my work. I am immensely grateful to him for everything from initially encouraging me to undertake doctoral level research, to providing guidance and critique at every stage of the project. I also want to thank my second supervisor Ronald Hutton, both for sparking my love of the seventeenth century, and for fighting my corner on several occasions in the quest for funding. For further helping to shape my ideas, I am indebted to my upgrade examiners Brendan Smith and Richard Sheldon; the anonymous referees of my journal article; the audiences of the various papers I have presented on this research; and those scholars I have corresponded with on the subject, in particular Chris Heal, Jonathan Harlow, and Peter Taylor. For final corrections, and suggestions about how to develop the research in future, I would also like to thank my external examiner Kenneth Morgan, and my internal examiner Hugh Pemberton. Likewise, for making it such a supportive environment in which to work, my thanks are due to all of the staff and students at the University of Bristol. In particular, for her transcriptions of the sixteenth century Port Books, and helping to train me when I began my own work on the seventeenth century accounts I am deeply indebted to Susan Flavin. In addition, I received useful advice on presenting my data from Sam Webster, and for proof reading I must thank Peter Taylor, Christine Stone, and Diane Fowler. I also want to thank my friend and fellow PhD student Harriett Webster, whose encouragement and advice, as well as discussions of our respective research have been invaluable. Finally, for an unending supply of patience and countless other support over the past four years, my greatest debt is to my parents Alan and Christine and my brother James. To them this thesis is dedicated.

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List of Abbreviations

BRO	Bristol Record Office
TNA PRO	The National Archives, Public Record Office
'1604 Book of Rates'	*The Rates of Marchandises as they are set downe in the Books of Rates for the Custome and Subsidie of Poundage, and for the Custom and Subsidie of Clothes*, (London, 1604).
'1612 Book of Rates'	*The Rates of Marchandises as they are set downe in the Books of Rates for the Custome and Subsidie of Poundage, and for the Custom and Subsidie of Clothes, Together with the Rates of Such Impositions as are Laide upon any Commodities, either brought into the Realme, or carried out of the same,* (London, 1612).
'1635 Book of Rates'	*The Rates of Marchandises as they are set downe in the Books of Rates for the Custome and Subsidie of Poundage, and for the Custom and Subsidie of Clothes, Together with the Rates of Such Impositions as are Laide upon any Commodities, either brought into the Realme, or carried out of the same,* (London, 1635).
'1675 Book of Rates'	*The Act of Tonnage & Poundage, and Book of Rates, with several Statutes at large relating to the Customs, (London, 1675).*

Introduction

The seventeenth century is one of the most pivotal in Bristol's commercial history. It witnessed the shift from the medieval world based on trade with Europe to the transatlantic system which was to form the basis of Bristol's eighteenth-century 'golden years'. Compared to trade in the Middle Ages and the eighteenth century, however, Bristol's commerce in the seventeenth century has been relatively little studied. Although a number of historians have devoted attention to it, there is no in-depth modern study, and in particular none which focuses specifically on Bristol's overseas trade. This thesis, therefore, will fill an important gap in current knowledge of Bristol's commercial history.

For England as a whole, there have been numerous studies of trade and the economy in the seventeenth century.[1] These, however, have tended to concentrate heavily on London, taking little account of the fact that trade in other parts of the country may have been very different in nature. In particular, the growth of regional industries and shift in the centre of trade away from the London-Antwerp axis meant that other ports, especially those on the west coast, began to regain ground on the capital at this time. A detailed study of the trade of seventeenth-century Bristol, the biggest of the outports in these years and the first of the west coast ports to become heavily involved in American commerce, therefore has the potential to be an important addition to the history of English overseas commerce. By the end of the seventeenth century Bristol still only contributed a relatively small percentage of the nation's overseas trade. Nevertheless, this study will shed light on the forces that were driving development away from London, and highlight the need for new studies of other ports.

[1] See for example: R. Davis, 'English Foreign Trade, 1660-1700', in W.E. Minchinton (ed.) *The Growth of English Overseas Trade in the 17th and 18th Centuries*, (London, 1969); R. Davis, *English Overseas Trade 1500-1700*, (London, 1973); F.J. Fisher, 'London's Export Trade in the Early Seventeenth Century', *Economic History Review* (1950); B.E. Supple, *Commercial Crisis and Change in England 1600-1642*, (Cambridge, 1964).

In addition to relying heavily on evidence from London, there is also a marked tendency for works on seventeenth-century economic history to skip over the middle years. Many studies either cease in 1642 or commence in 1660, and those which do encompass the middle years of the century tend to skim over the Civil War and Interregnum due to a lack of surviving evidence. Although the Civil War has long been a favourite topic amongst historians, studies to date have tended to focus on the political, religious, and military aspects of the conflict. An assessment of its impact on trade and the economy, albeit for just one region, will therefore be an important and original contribution. In terms of trade, this period is particularly important as it saw new long distance routes, such as those to the American colonies, become firmly established. These trades had begun to develop in the first half of the seventeenth century, but it was only with the soaring of the colonial population in the years after the Civil War that they really began to escalate. Due to the paucity of surviving customs records from London in the second half of the seventeenth century, there are relatively few existing sources that can be used to study the growth of the American trades. Between the Civil War and the 1690s, Ralph Davis had access to just two detailed sets of statistics, those covering London's exports and imports in 1662/3 and 1668/9 contained in the 'Book of Tables'.[2] More recently this has been supplemented by Nuala Zahedieh's work on a London Port Book from 1686, although data regarding the growth of the American trades during these years, and especially the 1650s, remains scarce.[3] Although Bristol still only contributed a relatively minor proportion of the national total, the figures generated by this study will therefore add significantly to overall knowledge of the formative years of this branch of trade.

Previous Approaches

Over the last hundred years or so, many historians have written about Bristol's seventeenth century trade, and come to a variety of different

[2] Davis, 'English Foreign Trade', pp. 84-5
[3] N. Zahedieh, *The Capital and the Colonies: London and the Atlantic Economy 1660-1700,* (Cambridge, 2010).

conclusions. Unlike the sixteenth and eighteenth centuries, however, there has been no detailed modern study. The conclusions of previous authors will be discussed in more detail in the body of the thesis, where they can be assessed in the light of the most recent evidence. Initially, however, it is worth outlining briefly the works of those who have studied Bristol's seventeenth-century trade, as well as the approaches they have taken.

Around the turn of the twentieth century, John Latimer published a number of volumes on Bristol's history. Perhaps the most relevant of these to the present study is his *History of the Society of Merchant Venturers of Bristol.*[4] This work takes in the entire history of the Society, but includes a lengthy chapter on 'the Society under the Stuart dynasty'. Latimer's research was based on a detailed examination of the Society's own records, and he included transcriptions of many key documents. As McGrath has shown, Latimer's interpretations were often inaccurate, and he could be selective in his choice of material.[5] In particular he was prone to portraying the Society as being victimised by the Crown. Nonetheless, his work does retain some value. Although not specifically focused on trade, Latimer also published several volumes of annals of Bristol's history, including *The Annals of Bristol in the Seventeenth Century.*[6] These were based around a detailed examination of a wide range of records, most notably the archives of the Bristol Corporation, and the State Papers. Even though Latimer's interpretation of events is at times questionable, this is an invaluable reference work to gain a flavour of the main events in Bristol in any particular year and goes well beyond the works of earlier authors such as Barrett and Seyer, which did little more than synthesise material contained in the Bristol chronicles.[7]

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[4] J. Latimer, *History of the Society of Merchant Venturers of Bristol, With some Account of the Anterior Merchants' Guilds*, (Bristol, 1903).
[5] P. McGrath (ed.), *Records Relating to the Society of Merchant Venturers of Bristol in the Seventeenth Century*, Bristol Record Society Vol. XVII ((1952), pp. ix-liv.
[6] J. Latimer, *The Annals of Bristol in the Seventeenth Century*, (Bristol, 1900).
[7] W. Barrett, *The History and Antiquities of the City of Bristol,* (Bristol, 1789); S. Seyer, *Memoirs Historical and Topographical of Bristol and it's Neighbourhood*, (Bristol, 1821-3); J.F. Nicholls and J. Taylor, *Bristol Past and Present*, (Bristol, 1881-2).

The first decades of the twentieth century saw Bristol's medieval trading past receive a great deal of attention from historians such as Eleanor Carus-Wilson. It was not, however, until the work of C.M. MacInnes that the seventeenth century was once again to receive attention.[8] In particular his *Bristol: A Gateway of Empire*, first published in 1939, charts the history of the city's role in overseas exploration and the American colonies, and includes several chapters on developments during the seventeenth century. His study perhaps tends to exaggerate the importance of ventures of exploration and colonisation, which were in fact economically marginal up until the mid-seventeenth century, while also perpetuating a false sense of inevitability regarding Bristol's engagement with America. On the whole, however, he throws some valuable light on aspects of Bristol's commercial history. As with Latimer, MacInnes examined a wide range of qualitative sources, although the lack of footnotes often makes it difficult to establish exactly what his sources of information were. There are also points when MacInnes made broad statements, with no apparent supporting evidence, which have been refuted by more modern scholarship. In particular he suggested that Bristol became heavily engaged with the slave trade in the second half of the seventeenth century, when in fact the evidence tends to suggest that any such involvement was fairly minimal.[9]

In many ways the greatest historian of seventeenth-century Bristol is Patrick McGrath. Between the 1950s and 1980s he published a good variety of works, taking in numerous aspects of seventeenth century Bristol and its trade.[10] Particularly valuable are his two edited collections

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[8] C.M. MacInnes, *Bristol: A Gateway of Empire,* (Newton Abbot, 1968); C.M. MacInnes, 'Bristol and Overseas Expansion', in C.M. MacInnes and W,F. Wittard (eds.) *Bristol and its Adjoining Counties,* (Bristol, 1955).

[9] This will be discussed in more detail in Chapter 4 (see p. 181).

[10] P.V. McGrath, 'The Merchant Venturers and Bristol shipping in the early seventeenth century', *The Mariner's Mirror*, vol. 36, no.1 (January, 1950); McGrath, *Records;* P.V. McGrath, 'The Society of Merchant Venturers and the Port of Bristol in the Seventeenth Century', *Transactions of the Bristol and Gloucestershire Archaeological Society*, volume 72 (1953); P.V. McGrath, 'Merchant Shipping in the Seventeenth Century: The Evidence of the Bristol Deposition Books', *Mariners Mirror,* XL (1954); P.V. McGrath, *Merchants and Merchandise in Seventeenth-Century Bristol*, (Bristol, 1955); P.V. McGrath, *John Whitson and the Merchant Community of Bristol,* Bristol Historical Association pamphlets no. 25 (Bristol, 1970); P.V. McGrath, *The Merchant Venturers of Bristol*, (Bristol, 1975); P.V. McGrath, 'Bristol and America, 1480-1631', in K.R.

of sources, which provide a wealth of documents and extracts regarding seventeenth-century trade. His history of the Merchant Venturers of Bristol represented a considerable advance on Latimer's work, and he also published pieces on the shipping industry and the development of Bristol's port facilities. As with earlier studies, McGrath's work was based largely on qualitative sources, in particular those found in the archives of the Merchant Venturers. Using these he was able to paint a detailed picture of life, business, and the workings of trade in the seventeenth-century city. Although on the whole McGrath felt that trade itself was too great a topic to handle, he did provide some limited statistical analysis. This consisted primarily of counting the destination or origin of ships appearing in the Bristol Port Books and Wharfage Books to establish changes in the overall volume of trade, and the relative importance of each branch. These were perhaps not the most reliable of statistical measures, but McGrath's deep-rooted understanding of Bristol, its merchants, and its trade meant that he drew many valid conclusions.

As part of his study of 'The Rise of the Western Ports', G.D. Ramsay also considered Bristol's commercial fortunes in the late sixteenth and seventeenth centuries.[11] Although writing at a similar time to McGrath, he came up with wildly differing conclusions regarding the state of Bristol's trade in the late Tudor and early Stuart years. In particular, where McGrath saw the early seventeenth century as a time of prosperity for Bristol, Ramsay suggested that it was a period of crisis and decay for the city's trade. Although he looked at a couple of Port Books, Ramsay conducted no statistical analysis, simply gleaning from them a general impression of the markets and commodities which made up Bristol's trade. The contrast between his conclusions and those of McGrath perhaps results from his uncritical over reliance on petitions from Bristol's merchants to the Crown, which tended to give an unduly negative impression of the city's trade.

Andrews et. al. (eds.), *The Westward Enterprise: English Activities in Ireland, the Atlantic and America 1430-1650*, (Liverpool, 1978); P.V. McGrath, *Bristol and the Civil War*, (Bristol, 1981).

[11] G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence: Studies in Some Modern Origins of the English-Speaking World*, (London, 1957), pp. 132-51.

As this study spills over into the late sixteenth century, it is also important to mention the work of Jean Vanes. In her PhD thesis and several subsequent publications, Vanes looked in detail at many aspects of the port of Bristol and its trade.[12] Her edited collection of *Documents Illustrating The Overseas Trade of Bristol in the Sixteenth Century* shows the wealth of qualitative evidence behind her work. She also, however, supplemented this with a decent amount of statistical evidence, mostly drawn from the Enrolled Accounts, which recorded yearly totals of wine imported, cloths exported, and the nominal value of other goods passing through Bristol.

W.B. Stephens is better known for his work on Exeter, but he also produced an article examining trade trends at Bristol in the seventeenth century.[13] Working at a similar time to Vanes, Stephens' study made greater use of summary statistics than previous works. The basis of this was the New Impositions returns for Bristol. However, as will be discussed in Chapter 1, as this duty did not apply equally to all commodities they are not a particularly reliable measure of Bristol's trade as a whole. Although the date range of his article encompasses the whole of the seventeenth century, Stephens' study focused mostly on the period before the Civil War, with the second half of the century receiving relatively scant attention.

The most detailed statistical investigation to date of Bristol's trade in the late sixteenth and seventeenth centuries is that of D.H. Sacks.[14] Sacks' work is principally one of social history, examining the tensions between

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[12] J.M. Vanes (ed.), *The Ledger of John Smyth, 1538-1550*, Bristol Record Society vol. 28 (1974); J.M. Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century', *Unpublished PhD Thesis, University of London* (1977); J.M. Vanes, *The Port of Bristol in the Sixteenth Century*, Bristol Historical Association pamphlets no. 39 (Bristol, 1977); J.M. Vanes (ed.), *Documents Illustrating the Overseas Trade of Bristol in the Sixteenth Century*, Bristol Record Society vol. XXXI, (1979); J.M. Vanes, *Bristol at the time of the Spanish* Armada, Bristol Historical Association pamphlets no. 69 (Bristol, 1988).

[13] W.B. Stephens, 'Trade Trends at Bristol, 1600-1700', *Transactions of the Bristol and Gloucestershire Archaeological Society*, XCIII (1974).

[14] D.H. Sacks, *Trade, Society and Politics in Bristol 1500-1640,* 2 vols., (New York, 1985); D.H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700* (Berkeley, 1991).

Bristol's merchant elite and the remainder of the community. He did, however, conduct a detailed statistical investigation of two Port Books from 1575/6 and 1624/5, although unfortunately, as will be discussed in the following chapters, his conclusions were undermined by a number of technical misunderstandings. For the second half of the seventeenth century his statistical examination was more limited. Other than a brief examination of tonnage figures from the 1671/2 Port Book to establish the extent of the American commerce, his analysis was confined to the relatively peripheral export of indentured servants.

Recent years have seen a fresh surge of interest in Bristol's Early Modern trade. In particular the ESRC funded project 'Ireland-Bristol Trade in the Sixteenth Century' has transcribed many of the sixteenth century Bristol Port Books, while Duncan Taylor carried out a similar study of the smaller Bristol Channel ports in the sixteenth century.[15] With regard to the seventeenth century, Jonathan Harlow has studied in detail the life and career of Thomas Speed, one of Bristol's most significant late seventeenth-century merchants.[16] As part of his study, Harlow has done a limited amount of statistical work on the trade of the port as a whole based on tonnage figures derived from the Society of Merchant Venturers Wharfage Books.

Overall, although many historians have examined the commercial world of seventeenth century Bristol, there has to date been no detailed statistical investigation of its trade. Previous studies have either been based largely on qualitative sources, which are not ideal for investigating the trends of trade, or on summary statistics, which do not necessarily show the whole picture. In addition, previous historians have tended to

[15] RES-000-23-1461 See: http://www.bris.ac.uk/Depts/History/Ireland/. Outputs of the project include: S. Flavin and E.T. Jones (eds.), *Bristol's Trade with Ireland and the Continent 1503-1601: The evidence of the exchequer customs accounts*, Bristol Record Society Vol. 61 (2009); S. Flavin, 'Consumption and Material Culture in Sixteenth Century Ireland', *Economic History Review* (2011). See also: D. Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports in the Sixteenth Century', *Unpublished PhD Thesis* (University of Bristol, 2009).

[16] J.A.S. Harlow, 'The Life and Times of Thomas Speed', *Unpublished PhD Thesis, University of the West of England*, (2008); J.A.S. Harlow (ed.), *The Ledger of Thomas Speed, 1681-1690*, Bristol Record Society Vol. 63 (2011).

avoid discussing the actual scale and nature of trade itself. A variety of themes including the workings of the port, overseas colonisation and expansion, the work of the Society of Merchant Venturers, and social tensions in the merchant community have been explored in-depth. However, the impenetrability of much of the surviving statistical evidence has led many historians to avoid the actual scale or make-up of trade. This study, therefore, by conducting an in-depth examination of a much larger body of the surviving statistical evidence, has made it possible to make a valuable contribution to existing knowledge of Bristol in the seventeenth century.

The Sources

The basis of this thesis is a detailed examination of what is perhaps the richest statistical source for the study of Early Modern overseas trade: the Port Books. The King's Remembrancer Port Books (housed in the E190 series at The National Archives at Kew) were the detailed records submitted by the customs officers to the Exchequer at the end of every year. With the obvious exception of smuggled goods, every consignment which was either exported from or imported into the country was recorded in them, along with a wealth of supporting details. These included the type of commodity, the duty it paid, its weight, number, or volume, and the containers that housed it; the name of the owner, and a varying amount of detail about his (or occasionally her) occupation and nationality. In addition the books provide the name of the ship, her master, home port, her immediate port of origin or destination, and usually her tonnage. These records were submitted in standard pre-prepared parchment volumes, and were usually fair copies written up later, rather than the original notes taken when the goods passed through the customs house. Every customs officer from the Customer and Controller down to the Searcher submitted their own account, so at one time there would have been a huge number of these Port Books. Time, however, has not been kind to what is now the E190 series. Up until 1911 they were stored in sacks in an exposed and weather-beaten room

and thus many have been severely affected by damp.[17] Indeed the National Archives Schedules of Destruction reveal that many of the Port Books were deliberately destroyed as they were not considered of sufficient value to be kept.[18] What was once a fine series, therefore, has been reduced to a patchy scattering of examples, many of which are in too poor a condition to be used. Nonetheless, the sheer level of detail they contain means that they remain an invaluable resource for the study of Early Modern English trade.

To conduct this study, detailed data from ten Port Books spanning the seventeenth century has been entered into Excel spreadsheets, allowing it to be subjected to a wide variety of analysis. These have been supplemented by four late sixteenth century Port Books which were digitised by the 'Ireland-Bristol Trade in the Sixteenth Century' project, and simple totals have also been extracted from a number of books which were not in good enough condition to yield a full set of data.[19] Rather than applying current wholesale values to the goods, it was decided to use the original poundage valuations recorded in the Port Books, as this allows direct comparison with data from other years without having to account for the effects of inflation.

The workings of the customs system will be explained more fully in Chapter 1. It is, however, worth summarising the significant features here. The majority of goods paid a tax called poundage, which amounted to 5 per cent of the value of the goods. This, however, was an official valuation, listed in a document known as the Book of Rates, rather than the current wholesale price. Certain goods, in particular wine, broadcloth, and tanned hides paid specific duties, based on their volume rather than their value. For these, therefore, nominal values which are roughly in line

[17] R.W.K. Hinton (ed.), *The Port Books of Boston 1601-1640*, Lincoln Record Society Vol. 50 (1955), p. xiii. Hinton was a former assistant keeper at the Public Record Office.
[18] I am grateful to Margaret Condon for providing me with this information, although the records themselves have not proved easy to get hold of.
[19] The 'Ireland-Bristol' project datasets have been published through the University of Bristol's online ROSE repository, and are available through: http://www.bris.ac.uk/Depts/History/Ireland/datasets.htm.

with the poundage valuations on other goods have been applied. This makes it possible to analyse trade as a whole, rather than having to treat goods paying specific duties separately.

There are a number of difficulties which have to be overcome to allow the Port Books to be interpreted reliably. The principal areas of concern will be outlined here, although, as the nature of these problems changed significantly over the course of the period covered by this study, they will also be considered in more detail in the later chapters. One of the greatest difficulties to be overcome is revisions of the customs rates. The valuations contained in the Books of Rates were revised upwards on a number of occasions to account for the effects of inflation. Such a revision in 1558 saw the duties increase by an average of 118 per cent.[20] Potentially, therefore, sudden jumps in the value of recorded trade may be a statistical illusion resulting from amendment of the customs rates, rather than a genuine increase in trade. Investigation of the Books of Rates has shown that the customs valuations were altered on a number of occasions throughout the seventeenth century. Nonetheless, by calculating the average rate of increase and adjusting the figures accordingly, it has proved possible to make meaningful comparisons of data from across the sixteenth and seventeenth centuries. These calculations will be discussed in more detail in the relevant chapters.

Smuggling may also have significantly distorted the Port Book figures. Evan Jones' study of smuggling in sixteenth century Bristol has shown that illicit activity was rife, with many of the city's most powerful merchants endeavouring to keep a portion of their goods away from the customs house.[21] In the late sixteenth century Bristol's smuggling had focused mostly on prohibited exports such as grain and leather, and on wine. While it seems likely that much the same pattern continued in the early seventeenth century, there were significant changes in the years

[20] T.S. Willan (ed.), *A Tudor Book of Rates,* (Manchester, 1962), pp. xxvii-xxviii.
[21] E.T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol*, (Farnham, 2012); E.T. Jones, 'Illicit business: accounting for smuggling in mid-sixteenth-century Bristol', *Economic History Review* (2001).

after the Restoration. The removal of prohibitions on agricultural goods, and low rates of duty on many exports meant that export smuggling declined. Meanwhile, the rise of the tobacco trade led to a great deal of import smuggling from the Americas. Although it will never be possible to establish the exact extent of Bristol's illicit trade, by considering the surviving evidence for each period as well as the relative incentive to smuggle in each branch of trade it is possible to gauge the likely impact of smuggling with some accuracy.

Perhaps the greatest weakness of the Port Books as a source is their patchy survival. Throughout the period, books only survive from individual years. This means that we do not have a continuous run of data. Potentially as a result of factors such as warfare, or the timing of the arrival of the wine fleet, figures from any particular year may not be representative of trade in general. A certain degree of caution is thus necessary in evaluating Port Book data, although to an extent this can be mitigated by employing other sources as a check. This can include using qualitative sources to give an idea of the context in which trade operated in any given year. It is also possible to employ figures from more continuous data series to show whether the year concerned was typical. For the later sixteenth century the yearly totals from the Enrolled Accounts will be used, for the early seventeenth century the New Imposition Returns, and for the Interregnum and post-Restoration years total tonnage figures from the Wharfage Books. On their own, these figures are both too lacking in detail, and even potentially unreliable, to give an accurate measure of the state of trade. However, they do provide a useful check on the Port Books. Even with some support from continuous statistical series, historians of later periods for which data is more plentiful may be critical of this reliance on figures from individual years, scattered in a not entirely even pattern across the century. On the other hand, in an age which has memorably been described as the 'Dark

Ages of English Economic History', the Port Books are by far and away the best source available.[22]

A particular problem in terms of availability of Port Book data is the period of the Civil War and Interregnum. For the rest of the period there is at least one import and one export account for each decade. However, no useable Port Books survive from between 1637/8 and 1670/1. To fill this gap in the data, this study has made use of the Society of Merchant Venturers' Wharfage Books. Wharfage was a separate duty charged on all goods imported into Bristol, and, initially at least, the Wharfage Books contain much the same information as the Port Books. In the past they have been relatively underused, but by applying nominal values from the Book of Rates it has been possible to extract sets of data from the Wharfage Books which, at least in terms of imports, are almost equal in quality to that from the Port Books. In all, three sets of Wharfage accounts have been transcribed, from 1654/5, 1659/60, and 1664/5. Together these give a good spread of detailed data across a period of Bristol's commercial history which has previously been little known.

Structure

Rather than taking a calendar definition of the seventeenth century, covering the years 1600 to 1699, this study will focus on the period 1558 to 1689. Defining the boundaries of such a long duration study is never easy, as no matter where the line is placed some significant developments will be either curtailed or omitted. Simply taking the dates of a century, however, is particularly arbitrary, so instead it was decided to adopt terminal dates which were dictated by the source material. The opening in 1558 coincides with the issuing of a new Book of Rates, the document on which all customs duties were based. The new book contained a major revision of customs valuations, meaning that comparison with earlier customs figures is significantly more difficult and

[22] F.J. Fisher, 'The Sixteenth and Seventeenth Centuries: The Dark Ages in English Economic History?' *Economica*, New ser., XXIV (1957), pp. 2-18.

creating a natural break in the statistics.[23] In terms of Bristol's trade itself, the 1560s also seem to mark a natural break point. These years marked the lowest ebb of a mid-sixteenth century decline in Bristol's commerce, so by taking in the four decades of Elizabeth's reign in addition to the seventeenth century this study will make it possible to examine the entire process of recovery and expansion.

The Glorious Revolution in 1689 was selected as the end date, less due to the fact that it marked a significant transition in English politics, but more because it again led to major changes in the customs system. Although the valuations for poundage (the principal form of duty which is recorded in the Port Books) appear to have remained unchanged, William of Orange's ambitions for continental warfare saw him introduce a raft of new duties on overseas trade, roughly quadrupling the level of import duties in less than a decade. This led to significant shifts in the incentive to smuggle, making a straightforward comparison with earlier trade very difficult.[24] As with 1558, therefore, comparison of statistics from before and after 1689 is much more complicated. In addition, by excluding the last decade of the seventeenth century, it conveniently avoids the commencement of Bristol's involvement with the slave trade in 1698. The increased prevalence of multi-part voyages such as the African triangular trade was to make for a very different commercial world in the eighteenth century, and one which requires different methods to those used to study seventeenth-century trade. As they only record the immediate port of origin or destination, from the eighteenth century onwards with the growth of multi-part voyages it increasingly becomes the case that the Port Books show only part of Bristol's trading activities. Fortunately, however, from the eighteenth century onwards much richer range of sources become available to examine commercial history, so there is less need to rely on the Port Books.

[23] Willan (ed.), *Tudor Book of Rates*, pp. xxvii-xxviii.
[24] R. Davis, 'The Rise of Protection in England', *Economic History Review*, vol. 19 No, 2 (1966), p. 306.

The structure of the thesis is slightly asymmetrical, although as with the terminal dates this is determined by the nature of the material. The growth of the American trades meant that Bristol's commercial world was a very different place in the second half of the seventeenth century, and hence a different approach is necessary to study it effectively. The first two chapters, therefore, will cover the years 1558-1642, while the final three take in developments over the period 1642-1689. Each chapter will explain the methodology and any particular concerns in interpreting the data for the period in question. The work of previous historians will then be considered, including both those focusing specifically on Bristol and others taking in the trade of the nation as a whole. In Chapter 1 this will be followed by an examination of the expansion of Bristol's trade as a whole in the late sixteenth and early seventeenth centuries. Chapter 2 explores the reasons for this success, examining the commodities carried by the ships passing through Bristol, and the markets to which they were trading. In the second part of the thesis, rather than considering trade as a whole, the American and European trades will be treated separately. Chapter 3 will use the Wharfage Books to explore the genesis of Bristol's American trades, tracking their growth through the years 1654 to 1665. Chapter 4 will then continue this story into the early 1670s and beyond, using the first surviving post-Civil War Port Books to take a more detailed look at the American trades, as well as considering the development of a more complex transatlantic system of trade. Finally, Chapter 5 will consider the on-going development of Bristol's traditional trades in the years between 1642 and 1689, as well as looking at the extent of Bristol merchants' engagement in new trades other than those to the Americas.

Chapter 1:

Trends of Trade, 1558-1642[1]

The years between the accession of Elizabeth I in 1558 and the Civil War in 1642 have often been seen as a difficult time for Bristol's overseas trade. The broadcloth exports which had historically formed the backbone of Bristol's trade with the continent had increasingly been monopolised by London merchants, and the shining light of American trade still lay far in the future. Indeed G.D. Ramsay has even gone so far as to describe the era as a 'dark epoch' and 'the lowest ebb of the trade of Bristol'.[2] Many of these conclusions, however, are based on a relatively limited range of evidence, or make incorrect assumptions about the nature of the sources, which can lead to a distorted picture. This chapter will present a fresh analysis, employing all of the available statistical evidence as well as examining the broader context into which this trade fitted to provide the most detailed picture to date of Bristol's overseas trade in the late Tudor and early Stuart years. In particular recent developments in computer technology have made possible a detailed analysis of the Port Books, allowing this rich source to be explored to an extent which was simply not feasible for previous generations of historians. The core of this chapter is a detailed analysis of fifteen Port Books spanning the years 1563 to 1638, supported by other customs statistics, including the Enrolled Accounts and New Impositions Returns, as well as a range of qualitative evidence. The results of this study challenge many previous misconceptions, suggesting that these were in fact years of prosperity for Bristol and its merchants.

[1] Much of the research for this chapter has been published as an article: R. Stone, 'The overseas trade of Bristol before the Civil War', *The International Journal of Maritime History*, Vol. 23 No. 2, (December 2011), pp. 211-229.

[2] G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence: Studies in Some Modern Origins of the English-Speaking World*, (London, 1957), pp. 136-7.

Before moving on to analysis of the data, a number of methodological concerns will need to be addressed. These include the patchy and irregular nature of the surviving data, the potential impact of revisions of the customs rates, and the possibility of distortions as a result of smuggling. The evolution of the trade of England as a whole during these years will then be considered to provide some context for the trends observed at Bristol. Following this, the existing literature specifically examining Bristol's trade in these years will be assessed. The chapter will then conclude with a chronological account of Bristol's trade based on the customs data. This will examine how the recorded value of trade developed between the 1550s and 1630s, considering the impact of external factors (both political and economic) on this development. The next chapter will then seek explanations for the trends uncovered here, examining the markets and commodities which made up Bristol's trade, and how these allowed it to prosper in years when London's trade was struggling.

Methodological Challenges

Sources

One of the greatest difficulties in investigating Bristol's overseas trade in the late sixteenth and early seventeenth centuries is the relatively limited range of available sources. In many respects the best quantitative source available is the Port Books. In the past the level of detail which these provide has rendered them almost impenetrable, with only the most cursory of statistical analysis being applied. With recent advances in computer technology, however, they can be made to yield a wealth of data, not only giving yearly totals for Bristol's declared imports and exports, but also allowing detailed analysis of the commodity make-up of these trades, and the overseas markets with which Bristol's merchants were dealing. For all of their great strengths, however, the Port Books do have one overriding weakness – their patchy survival. For the eighty-two years covered by this chapter, it has only been possible to compile Port Book datasets for fourteen years. In addition not all Port Books contained

figures for both imports and exports, so for six of the fourteen years only the export side of the records has survived, and for a further two we only have the imports. On a more positive note, however, the distribution of the surviving Port Books is fairly even; for all but one decade between the 1560s and the 1630s it has been possible to compile at least one dataset for both imports and exports.

In addition to the detailed data provided by the Port Books, other customs records can also be used to provide supporting evidence. Whilst these often comprise just yearly totals of duty collected, they do have the advantage of surviving in fairly complete runs. Perhaps the best of these records is the Enrolled Customs Accounts.[3] These were compiled after the more detailed Port Books were returned to the Exchequer, and provide annual totals for each port for: wine imported, cloths exported, and poundage duty paid by all other commodities. For the last four decades of the sixteenth century these accounts give very good coverage, with full figures for Bristol available for all but the years 1586-1593 (when the Bristol receipts were farmed by Walsingham).[4] Unfortunately, however, the Enrolled Accounts cease after the accession of James I in 1603, so for the early seventeenth century it is necessary to turn to another type of source for a continuous set of figures.

In place of the Enrolled Accounts there survives, from 1610, the returns of the 'New Impositions'.[5] Impositions were a novel type of duty, charged in addition to poundage, and were much resented as they were directly 'imposed' by the Crown without recourse to Parliament, leading many to question their legality. They had originated in 1592 as an additional levy on Levantine currants for the upkeep of the embassy in Constantinople, but the Crown's increasing desperation to raise revenue (coupled with a favourable legal decision) meant that the system was greatly extended in

[3] The National Archives/Public Record Office, E356/28-9.
[4] J. M. Vanes, *The Port of Bristol in the Sixteenth Century*, Bristol Historical Association pamphlets no. 39 (Bristol, 1977), p. 21.
[5] TNA PRO, E351/797-826.

1607 to apply to a much broader range of commodities.[6] While the New Imposition Returns provide a relatively complete series for this period, with totals for duty collected on both imports and exports surviving for every year between 1610/11 and 1639/40, their reliability as trade statistics is somewhat limited.

The greatest weakness of the New Imposition Returns is that duty was only paid on a relatively small range of commodities, although imports are better covered than exports. As a result they are not necessarily representative of the trade of the port as a whole; indeed W.B. Stephens has suggested that shipments on which Imposition was paid only represent approximately a third of Bristol's trade in these years.[7] They also did not tax all commodities equally. Seeking to discourage trade in commodities which were felt not to be beneficial to the nation and to encourage trade in those that were, the Crown deliberately placed high duties on some goods and lower ones on others. Exports of raw materials and imports of luxuries and manufactures paid a high rate of duty, while imports of raw materials were left alone. When the Impositions were first introduced they were described by the Lord Treasurer as not a tax upon trade in general, but one on 'spices, silks, cloths of gold and other such things as we are desirous should be made at home'.[8] Comparing the rate of Imposition to the nominal valuation used for poundage for some of the main commodities imported into Bristol confirms this variation (see Table 1). The New Imposition rate on exports of coal was twelve times higher than its usual customs valuation (£8 per fodder rather than 13s. 4d.), whereas iron imports were rated at a little more than two thirds of their usual value (£5 per ton rather than £7). The main implication of this for analysis based on the New Imposition Returns is that changes in receipts could reflect a shift in the balance of commodities being traded, rather than any alteration in the volume of trade. For instance, a decline in the total New Impost receipts would occur if merchants switched from

[6] P. Croft, 'Fresh Light on Bate's Case', *The Historical Journal*, Vol. 30 No. 3 (1987).
[7] W.B. Stephens, 'Trade Trends at Bristol, 1600-1700', *Transactions of the Bristol and Gloucestershire Archaeological Society*, XCIII (1974), p. 158.
[8] Croft, 'Fresh Light on Bate's Case', p. 523.

exporting lead, which paid a high level of Imposition, to sheepskins, which did not pay Imposition.[9] Indeed, the decline in Bristol's New Imposition returns on exports in the years after their introduction suggests this may well have been the case, as merchants sought to avoid trading in those commodities which paid a high rate of duty.

Table 1 - Comparison of Poundage and Imposition on Bristol's Key Commodities:[10]

Commodity	Unit	Poundage (1635)			New Imposition (1635)			Ratio
		£	s	d	£	s	d	
Calf Skins	The dozen	0	12	0	0	0	0	-
Coal, London (export)	The chaulder	0	13	4	8	0	0	12.00
Figs	The peece (60 lb)	0	5	0	0	10	0	2.00
Fish, Newfoundland	The barrel (6 score)	0	20	0	0	6	8	0.33
Fish, Salmon	The barrel	0	40	0	0	10	0	0.25
Fish, Salmon Girles	The barrel	0	15	0	0	5	0	0.33
Hops	The cwt (112 lb)	0	20	0	0	30	0	1.50
Iron	The tonne	7	0	0	0	5	0	0.04
Lead, Uncast (export)	The Fodder (20 cwt)	32	0	0	40	0	0	1.25
Oil, Seville	The ton	16	0	0	20	0	0	1.25
Oil, Train (Newfoundland)	The ton	6	0	0	0	40	0	0.33
Prunes	The cwt (112 lb)	0	10	0	0	10	0	1.00
Raisins, Great	The peece	0	10	0	0	26	8	2.67
Raisins, of the sun	The cwt (112 lb)	0	18	0	0	36	0	2.00
Salt, Bay (French)	The bushel	0	0	6	0	0	3	0.50
Sugar, White	The cwt (112 lb)	3	6	8	8	3	4	2.45
Sumach	The cwt (112 lb)	0	13	4	0	26	8	2.00
Vinegar	The ton	0	46	8	3	13	4	1.57
Wax	The cwt (112 lb)	4	0	0	0	40	0	0.50
Woad, Toulouse	The cwt weight	0	16	8	0	13	4	0.80
Wood, Deales (Mealbrough)	The cwt (6 score)	4	0	0	0	40	0	0.50
Wool Cards	The dozen	0	10	0	0	5	0	0.50
Wool, Spanish	The cwt (112 lb)	3	0	0	4	0	0	1.33

A final complication comes from the fact that the rate of duty for Impositions was revised on several occasions during these years. Most notable of these is a significant revision in 1635, which led to Impositions collected at Bristol jumping from £30,000 in 1634/5 to £50,000 in

[9] '1635 Book of Rates'.
[10] '1635 Book of Rates'.

1635/6.[11] This means that figures from the earlier part of the period cannot be compared directly to those from the latter 1630s. Overall, the New Imposition Returns do have some value, and can be used to a limited extent to give a continuous series of data to provide a check on trends indicated by the Port Books. They must, however, be treated with a degree of caution, and certainly cannot be used on their own as a measure of Bristol's overseas trade as a whole.

For the vast majority of the early seventeenth century, therefore, the only statistical source which can be relied upon to give a detailed and relatively reliable impression of Bristol's overseas trade is the scattering of surviving Port Books. Relying on such an irregular set of data could perhaps provoke criticism from historians studying later periods, who are used to working with long runs of yearly figures. A figure for an individual year could potentially be either higher or lower than normal (perhaps due to the late or early arrival of the wine fleet) or represent atypical trading conditions due to factors such as warfare, or a poor harvest. In an age described by Professor Fisher as 'the Dark Ages of English economic history', however, it would be rash to ignore the best surviving sources simply because they are less than ideal.[12] This study will, therefore, be based on an examination of the few surviving Port Books which are in a good enough condition to provide a useable dataset. Care will be taken to establish the context of any individual year from which data survives and the likely impact of this on trade, and where possible other sources will be employed to support the trends suggested. Working with the Port Books is not without its technical difficulties, many of which will be explored below. They do, on the other hand, also give the advantage of an considerable depth of data rather than just gross totals of duty paid, providing the opportunity for a range of detailed analysis of commodities, markets, and numerous other aspects of trade.

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[11] Based on a comparison of TNA/PRO, E351/821 and E351/822.
[12] F.J. Fisher, 'The Sixteenth and Seventeenth Centuries: The Dark Ages in English Economic History?' *Economica*, New ser., XXIV (1957), pp. 2-18.

Customs Rate Revisions

A crucial problem which must be overcome in any study based on customs data is potential revisions to the rates at which duty was charged. As the data contained in the Port Books was dependent on the duty collected, rather than the market value of the goods, any apparent shifts in revenue could in fact be the result of changes to the rate of duty rather than any change in the trade itself. Indeed D.H. Sacks has suggested that 'because the rates upon which the Port Books relied were twice revised upwards early in James I's reign' any rise in the ad valorum duties recorded in the Port Books could be 'only illusory'.[13]

Under the English customs system at this time, overseas trade goods paid one of two basic types of duty. Some, such as wine, leather and broadcloth, paid 'specific' duties, which meant that the duty was dependent on the *volume* of goods shipped: broadcloth, for example, paid 6s. 8d. per cloth. All other goods paid poundage, an *ad valorem* tax of one shilling in the pound. Poundage thus amounted to a 5 per cent tax on the recorded value of the goods. This meant, for example, that a barrel of honey valued at 30s. in the Port Book would be liable to pay 1s. 6d. poundage. It is important, however, to understand that the values recorded in the Port Books were based neither on the market value of the goods nor on the merchant's own declaration. Instead, valuations were based on an official list known as the 'Book of Rates' which recorded the nominal value of every type of commodity known to the customs service.[14] Therefore, even if the market value of the aforementioned barrel of honey was known to be 60s., it would still be valued by the customs at 30s.

With the rapid inflation which characterised this period, it was occasionally necessary to revise the valuations contained in the Book of Rates upwards to adjust for rising prices. As Sacks has suggested

[13] D.H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700* (Berkeley, 1991), pp. 376.

[14] For a more detailed explanation of the English customs system, see T.S. Willan (ed.), *A Tudor Book of Rates,* (Manchester, 1962).

therefore, any apparent rise in the recorded value of goods paying poundage could reflect nothing more than an increase in the official customs valuations. Such a revaluation had certainly happened in 1558 when a new Book of Rates was issued in the wake of the rapid inflation following the debasement of the coinage in the 1540s. Calculations by T.S. Willan have shown that the valuations contained in this new Book of Rates had experienced a mean rise of around 118 per cent, resulting in a doubling of the recorded value of goods paying poundage.[15]

The 1558 revision was the last during Elizabeth's reign, and contrary to Sacks' concerns there was no such significant overhauling of the Book of Rates valuations under either James I or Charles I. Although several new Books of Rates were issued during the early Stuart years, only that of 1604 saw the poundage valuations undergo noteworthy revision. Detailed analysis shows that even this resulted in only minor changes to the overall value of goods recorded. For example, while Seville oil had its valuation doubled from £8 per ton to £16, raisins of the sun were increased by just eight per cent (from 16s. 8d. the hundredweight to 18s.) and sugar remained unchanged at £3 8s. 16d. per hundredweight. As the extent of the revaluation varied so markedly from commodity to commodity, determining the exact level of the increase is difficult. Moreover, for some goods changes in the terminology used or the unit of measure employed make a direct comparison virtually impossible. There are, however, still 780 commodities appearing in both the old and new Book of Rates where both the definition and unit of measure remain the same and thus a direct comparison is possible. This reveals that the official valuations of 553 commodities were left unchanged in 1604, that 52 goods had their valuations decreased, and that 175 had their values increased (see Table 2).[16] The overall impact of these changes was a mean rise of just 13 per cent, far short of Willan's figure of 118 per cent for the previous revision. As this figure is based on the entire Book of Rates it may be that it is artificially low, as it will naturally include some

[15] Willan, *Tudor Book of Rates,* pp. xxvii-xxviii.
[16] This is based on a comparison of Willan, *Tudor Book of Rates* and '1604 Book of Rates'.

commodities which were rarely traded and thus did not merit a revision. However, even when the analysis is restricted to a selection of 25 of the most significant commodities for Bristol's trade (accounting for 65 per cent of the value of the goods paying poundage in Bristol in 1600/1) the mean rise in valuations is still only 20 per cent (see Table 3).[17] As a final check, Bristol's trade in these 25 commodities for 1600/1 was recalculated using both the old and new rates of duty. This showed that while the total value of these goods in the 1600/1 account was listed as £17,759.83, if the 1604 valuations had been in use that year, the total value of the goods would have been £19,043.15.[18] The revaluation would thus have resulted in a rise of just 7.23 per cent in the customs receipts collected on these goods. If anything, this would suggest that the impact of the revaluations in Bristol was less significant in terms of the customs revenue collected than the mean rise of 13 per cent would suggest.

Table 2 - Changes in Poundage Valuations, 1558-1604:[19]

	Number	Mean Increase (%)
Stay the Same	553	-
Increase	175	68.78
Decrease	52	-32.67
Number Comparable	780	13.25

[17] Based on analysis of <http://hdl.handle.net/1983/1308>.
[18] Based on analysis of '1604 Book of Rates'; and <http://hdl.handle.net/1983/1308>.
[19] Willan, *Tudor Book of Rates* and '1604 Book of Rates'.

Table 3 - Comparison of Poundage Valuations for Bristol's Key Commodities, 1558 and 1604:[20]

		1558			1604			%
Commodity	**Unit**	**£**	**s.**	**d.**	**£**	**s.**	**d.**	**Increase**
Calf Skins	The dozen	0	10	0	0	12	0	20
Coal	The chaulder	0	6	8	0	6	8	0
Currants	The cwt (112 lb)	0	30	0	0	30	0	0
Figs	The peece (60 lb)	0	2	8	0	5	0	88
Fish, Newfoundland	The barrel (6 score)	0	20	0	0	20	0	0
Fish, Salmon	The barrel	0	30	0	0	40	0	33
Fish, Salmon Girles	The barrel	0	15	0	0	15	0	0
Ginger	The pound	0	0	12	0	0	12	0
Hops	The cwt (112 lb)	0	10	0	0	20	0	100
Iron (import)	The ton	4	0	0	7	0	0	75
Lead	The cwt (112 lb)	0	15	0	0	15	0	0
Oil, Seville	The ton	8	0	0	16	0	0	100
Oil, Train	The ton	5	0	0	6	0	0	20
Prunes	The cwt (112 lb)	0	10	0	0	10	0	0
Raisins, Great	The peece	0	5	0	0	10	0	100
Raisins, of the sun	The cwt (112 lb)	0	16	8	0	18	0	8
Salt, Bay (French)	The bushel	0	0	6	0	0	6	0
Sugar	The cwt (112 lb)	3	6	8	3	6	8	0
Sumach	The cwt (112 lb)	0	13	4	0	13	4	0
Vinegar	The ton	0	46	8	0	46	8	0
Wax	The cwt (112 lb)	3	0	0	4	0	0	33
Woad, Toulouse	The cwt	0	13	4	0	16	8	25
Wood, Deales (Mealbrough)	The cwt (6 score)	3	6	8	4	0	0	20
Wool Cards	The dozen	0	10	0	0	10	0	0
Wool, Spanish	The cwt (112 lb)	5	0	0	3	0	0	-40

New Books of Rates were issued on several occasions between 1604 and the outbreak of the Civil War, but crucially for the purposes of analysis based on the customs records the poundage valuations remained largely unchanged.[21] There were some minor alterations, with a few commodities being removed from the book while others were either

[20] Willan, *Tudor Book of Rates* and '1604 Book of Rates'. The commodities selected were the twenty five highest value traded through Bristol (combined imports and exports) in 1600/1 for which it was possible to find a valuation in the Book of Rates.

[21] New Books of Rates were issued in 1609, 1610, 1635, and 1636. A.M. Millard, 'The Import Trade of London', 1600-1640', (Unpublished PhD thesis, London School of Economics and Political Science, 1956), pp. 19-20.

added to the list or were divided into subcategories. In the vast majority of cases where a direct comparison can be made, however, the official values of goods in the 1635 Book of Rates (in use up to 1642) were identical to those listed in 1604.[22] With Parliament remaining uncooperative, the first Stuart monarchs resorted to the addition of further Imposition duties to expand their revenue from customs receipts, rather than revising the valuations in the Book of Rates. Impositions could be 'imposed' directly by royal prerogative without recourse to Parliament, whereas adjusting the Book of Rates would require parliamentary consent. As tensions mounted between the King and Parliament, the political consequences of this policy for Charles I were catastrophic. For statistical purposes, however, it does make the situation much simpler. This means that between 1558 and 1642 there was only one significant revaluation (the 1604 book) which resulted in a mean rise of no more than a fifth. Therefore, any increases in excess of 20 per cent in the recorded value of goods paying poundage must have been as a result of a real increase in trade.

As will become apparent, this figure of 20 per cent is actually a relatively minor increase in comparison to the trends observed in the early seventeenth-century Port Books, so it has not been considered necessary to directly adjust the figures to compensate. Some modification is, however, needed to keep the nominal values of goods paying specific duties in line with those paying poundage. The duty paid on goods such as leather, broadcloth, and wine was based on their volume, rather than their value, so to allow them to be compared to the remainder of Bristol's trade they have to be assigned a nominal value. One solution to this problem would be to simply apply current wholesale prices for these commodities; Sacks for example valued wine at £15 per ton and broadcloth at £8 per piece based on early seventeenth-century

[22] In 1609 the subsidy for tonnage and poundage was revised on 49 commodities, with all but two of these being reductions. The changes in 1610 and 1635 were restricted to the addition of Imposition duties, and in 1636 tonnage and poundage was raised on six commodities. Millard, 'The Import Trade of London', pp. 19-20.

wholesale prices.[23] This approach, however, does not take account of the fact that the valuations in the Books of Rates rarely reflected current wholesale prices, and in fact were often significantly lower than them. As Table 4 shows, comparison of the 1604 Book of Rates with known wholesale prices from the first decade of the seventeenth century reveals market values in fact to have been two or three times higher than the customs valuations, with even greater disparities occurring in the case of agricultural products. For example, while lead was valued at £0.45 the hundredweight by the 1604 Book of Rates, its average wholesale price for the decade 1603-1612 was 15s. 4½ d. the hundredweight, 70 per cent more than the customs valuation. The difference for wheat was even more dramatic: the Book of Rates valued it at £0.33 the quarter, whereas its wholesale price was more than five times higher at £1.76 the quarter. Applying unadjusted wholesale prices to goods paying specific duties would, therefore, greatly exaggerate the importance of trade in these commodities.

Up until 1604 this study has adopted the values for goods paying specific duties used by the ESRC funded project *Ireland-Bristol Trade in the Sixteenth Century*: wine is valued at £8 per ton, cloths of assize at £4 the cloth and leather at £2 the dicker.[24] As customs valuations were on the whole two to three times lower than current wholesale prices, and these figures are roughly half the wholesale prices employed by Sacks, these valuations should be roughly in line with those on commodities paying poundage. For the years following the 1604 revaluation these nominal values have been adjusted upwards by roughly 13 per cent (the average increase in Book of Rates valuations), giving new nominal values of £9 per ton of wine, £4.50 per cloth of assize, and £2.25 per dicker of leather.

[23] Sacks, *Widening Gate*, p. 41.
[24] <http://www.bris.ac.uk/Depts/History/Ireland/datasets.htm>, accessed: 15/06/2012.

Table 4 - Comparison of 1604 Poundage Valuations with Contemporary Wholesale Prices[25]

			1603-1612		1633-1643	
Commodity	**Quantity**	**Customs Valuation (£)**	**Average Wholesale Price (£)**	**% Difference**	**Average Wholesale Price (£)**	**% Difference**
Barley	quarter	0.25	0.97	388	1.21	484
Hops	cwt	1.00	3.32	332	4.11	411
Iron	cwt	0.35	1.63	466	2.33	666
Lead	cwt	0.45	0.77	171	0.87	193
Nutmegs	lb	0.15	0.22	147	0.24	160
Prunes	12 lb	0.05	0.13	260	0.11	220
Raisins	12 lb	0.10	0.21	210	0.25	250
Rice	12 lb	0.09	0.3	333	0.22	244
Salt	Quarter	0.27	0.94	348	1.34	496
Sugar	12 lb	0.40	1.01	253	1.08	270
Wheat	Quarter	0.33	1.76	533	2.06	624

Smuggling

A final consideration which must be taken into account when assessing the reliability of statistics based on the customs records is the potential impact of smuggling. Evan Jones' work on Bristol's illicit trade in the sixteenth century has shown that smuggling made up a sizeable proportion of the city's commerce, with many of its leading merchants and political figures implicated to some extent.[26] By its very nature illicit trade was not recorded in official customs records, so the picture presented by the Port Books will not represent all of Bristol's trade. Smuggling would, however, only ever mean that the actual value of trade was higher than that recorded in the Port Books. The existence of a significant illicit trade does not, therefore, undermine the main conclusion of this chapter: that

[25] Based on a comparison of James E. Thorold Rogers, *A History of Agriculture and Prices in England, Volume 5* (Oxford, 1887); and the 1604 Book of Rates. This table shows a comparison of the valuations found in the 1604 Book of Rates (in use throughout the early Stuart period) and known wholesale prices from the time (from Rogers' survey). Using the wholesale price from a specific year would run the risk of an atypical price, so a decennial average for the decade closest to the 1604 Book of Rates has been selected. The last decade before the Civil War is also reproduced to show any potential effects of price rises. To allow calculations, the values have been converted into decimals. The figure for "% difference" expresses the typical wholesale value as a percentage of the customs value. Although analysis of a wider range of commodities would be preferable, the lack of a detailed recent study of price data from the seventeenth century meant that it was only possible to find reliable data for eleven of the goods regularly involved in Bristol's trade.

[26] E.T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol*, (Farnham, 2012).

Bristol's trade was expanding. If anything, it is likely to mean that trade was even healthier than the official figures suggest. It may, however, affect conclusions about the proportions of this trade. Differences in regulation of trade to particular regions or in certain commodities meant that the incentive to smuggle varied greatly from one branch of Bristol's trade to another. Trade in heavily taxed and prohibited commodities, or to markets which were subject to royal monopolies or other restrictions are thus likely to be more significant than figures from the customs records suggest. Before embarking on an analysis of the trade statistics, it is therefore worth assessing how Bristol's illicit trades are likely to have evolved in the early seventeenth century. This includes both assessing the surviving evidence for illicit practices, as well as examining where rates of taxation or other restrictions are likely to have given merchants sufficient incentive to smuggle.

In the mid-sixteenth century Bristol's illicit activities had focused largely on exports, and in particular prohibited wares such as leather and grains.[27] Although licences for prohibited goods became more readily available in the early seventeenth century, these were still costly and there is considerable evidence that Bristol carried on a substantial illicit export trade in agricultural goods such as butter and calf skins (see pp. 68-71 for a fuller discussion of this). In the latter part of the sixteenth century the introduction of a range of new duties had also made import smuggling increasingly common, with the wine trade in particular likely to be affected.[28] Methods of evasion could either involve deliberately under-declaring the volume of a consignment with the collusion of the customs officers so that it paid less duty, or 'colouring' a high value commodity for one of lower value. For example this could include declaring good wine as corrupt (turning to vinegar) so that it paid poundage rather than the higher specific duties; sixty-three tuns of corrupt wine were recorded in 1575/6.[29] Another example, as aggrieved former customs clerk Thomas

[27] Jones, *Inside the Illicit Economy*, ch. 5.
[28] Jones, *Inside the Illicit Economy,* pp. 193-7.
[29] Jones, *Inside the Illicit Economy,* pp. 195-6; http://hdl.handle.net/1983/1305.

Watkins alleged had occurred in 1600, is the entering of 80 cwt of currants as 20 cwt of prunes.[30] Such practices appear to have been fairly common during Elizabeth's reign, so it seems highly likely that in the early seventeenth century Bristol's merchants continued to smuggle both prohibited exports, and imports which were subject to a high rate of duty.

In the case of the wine trade, Jones has suggested that to an extent the level of smuggling may actually have begun to decline as the sixteenth century wore on, with increases in the wholesale price of wine beginning to reduce the burden of the heavy taxes introduced in 1558. When the impost on French wine was first brought in the combined taxes payable would have amounted to 42 per cent of the total value. However as prices continued to rise with no further taxes being imposed, by the 1590s the tax burden on French wine had fallen to just 17 per cent of its wholesale value.[31] The incentive to smuggle wine was therefore much less than it had been in the middle of the century. Moving into the seventeenth century, the level of taxation on wine appears to have remained fairly stable. By 1635 imports of French wine into the outports were still only subject to a combined tax of 53s. 4d. (£2.66) per ton, and Iberian wines slightly more at 27s. 2d. the butt (£2.92 per ton).[32] Bulk wholesale prices are a little difficult to come by for wine, but using Jones' figure of £16 per ton this would suggest a tax of around 16.5 per cent on French wine, and 18 per cent on Iberian. Thorold Rogers' averages for smaller quantities of wine, which unfortunately are not suitable for analysis of bulk imports as they would have been inflated by the wholesaler's margins, suggest that the price remained relatively stable in the late sixteenth and early seventeenth century. The price for French claret was 2s. 1.75d. the gallon between 1583 and 1592 rising to 2s. 7d. the gallon between 1633 and 1642. The price for Sack (a sweet wine from the Iberian Peninsula) rose a little more, from 3s. 1.5d. in 1583-92 to

[30] Oliver Dunn, 'The Petitions of Thomas Watkins against Customer John Dowle 1598 - 1600' (BA Thesis, University of Bristol, 2006), p. 69.
[31] Jones, *Inside the Illicit Economy*, pp. 193-5.
[32] '1635 Book of Rates'.

4s. 4.5 d. in the decade before the Civil War.[33] The incentive to smuggle wine, therefore, remained similar to that which had existed in the last decade of the sixteenth century. A tax of around 17 per cent is likely to have resulted in a reasonable degree of wine smuggling, although probably not on the scale seen in the 1560s and 70s.

For both imports and exports, the introduction of the New Imposition duties in the early seventeenth century may have had a further effect on the level of smuggling. If the addition of these duties meant that the amount of duty charged increased at a faster rate than inflation of prices the incentive for merchants to smuggle would increase. Resentment at their questionably legal mode of introduction may also have meant that merchants felt less compunction about evading payment of duty on those commodities subject to the New Impositions, and may even have regarded smuggling them as a political protest.[34] As has already been discussed (see pp. 17-20) the rate at which the New Impositions were charged varied markedly from commodity to commodity, with luxury imports and raw material exports being singled out for particularly high rates. The relationship between rising prices and increases in duty was, therefore, equally variable, and thus their potential to incite illicit trade varied greatly from commodity to commodity. The level of duty on imports of Spanish iron, for example, merely matched inflation. Customs duties increased by around 80 per cent between 1558 and 1635, roughly equalling the growth in the average wholesale price for iron (see Figure 1). On other goods, however, the Imposition represented an increase considerably greater than inflation. The total duty on raisins of the sun, for example, was increased by 224 per cent in the early seventeenth century, while their price rose by little more than 35 per cent between the 1580s and 1630s (see Figure 2). Goods such as hops and sugar show a similar trend, but the most dramatic example is the Imposition on lead exports (see Figure 3). To prevent foreign industries and armies benefitting from exports of English lead, these exports were subjected to

[33] Rogers, *History of Agriculture and Prices,* p. 476.
[34] Croft, 'Fresh Light on Bate's Case', pp. 33-5.

a very high rate of Imposition. While prices for lead rose by just 36 per cent in the late sixteenth and early seventeenth centuries, the rate of duty was increased by 250 per cent when the Impositions were first introduced, and by 1635 was at 600 per cent of its 1558 level.

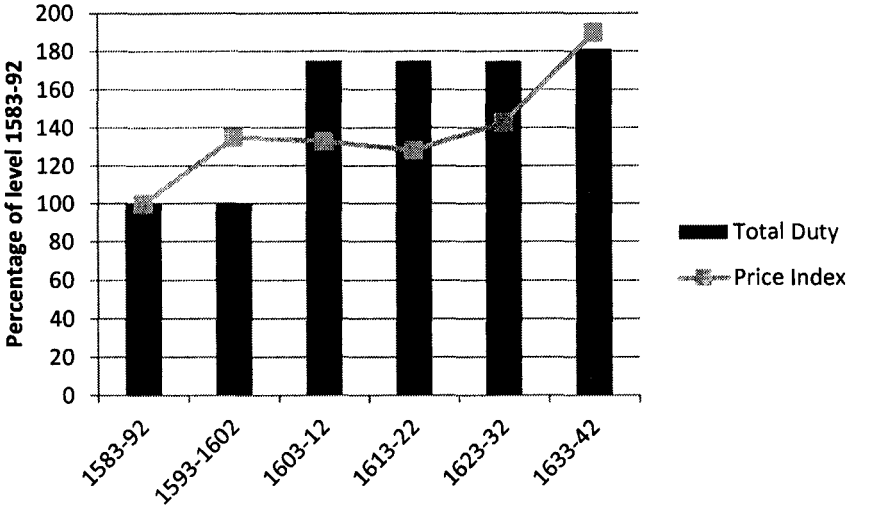

Figure 1 - Comparison of Increases in Price and Duty Payable for Iron, 1583-1642:[35]

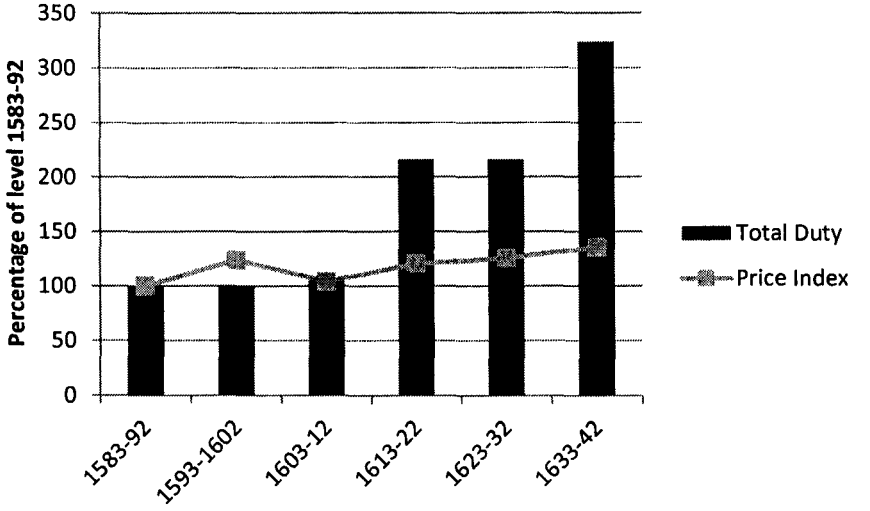

Figure 2 - Comparison of Increases in Price and Duty Payable for Raisins of the Sun, 1583-1642:[36]

[35] Rogers, *History of Agriculture and Prices*, p. 504; Willan, *Tudor Book of Rates*; '1604 Book of Rates'; '1612 Book of Rates', '1635 Book of Rates'. To avoid year to year fluctuations in price, Rogers' averages for the decade have been used.

[36] Rogers, *History of Agriculture and Prices*, p. 477; Willan, *Tudor Book of Rates*; '1604 Book of Rates'; '1612 Book of Rates', '1635 Book of Rates'. To avoid year to year fluctuations in price, Rogers' averages for the decade have been used.

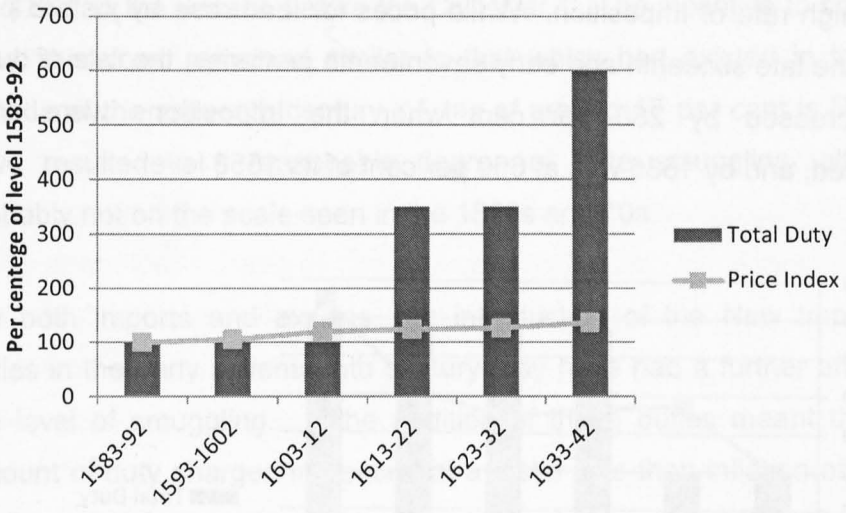

Figure 3 - Comparison of Increases in Price and Duty Payable for Lead, 1583-1642:[37]

Increases in duty did not, however, automatically result in an increase in smuggling. In ports such as Bristol, where there was a reasonably heavy presence from the customs officers, merchants would only resort to illicitly trading in a particular commodity when the level of taxation made the risk worthwhile.[38] As Figure 4 shows, even after the introduction of the New Impositions the level of taxation on the majority of commodities for which a comparison was possible remained fairly minor. Although poundage was in theory a tax of 5 per cent, by the end of the sixteenth century inflation had reduced this to between 0.5 and 3 per cent of the wholesale value of many goods. Even after the 1604 revaluation and the successive introductions of Imposition duties in 1608 and 1636, most commodities still only paid a combined tax equivalent to between 2 and 5 per cent of their wholesale value. To an extent the deliberate targeting of commodities is evident, with the low level of Imposition on imports of iron meaning that they still paid taxes equivalent to less than one per cent of their value, while an imported luxury such as white sugar paid 5 to 6 per cent. This low level of duty is unlikely to have justified the risks of

[37] Rogers, *History of Agriculture and Prices*, p. 504; Willan, *Tudor Book of Rates*; '1604 Book of Rates'; '1612 Book of Rates', '1635 Book of Rates'. To avoid year to year fluctuations in price, Rogers' averages for the decade have been used.

[38] At the smaller Bristol Channel Ports, however, the risks were lower and smuggling was therefore more extensive, with duty even being evaded on low value items such as pitch. See: D. Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports in the Sixteenth Century', (PhD Thesis, University of Bristol, 2009), p. 227.

smuggling. The same, however, was not necessarily the case with lead exports. It's comparatively high rate of imposition resulted in lead paying around 9 per cent of its value in customs duties in the 1610s and 20s, and after 1635 this rose to almost 14 per cent. The Port Books show a marked decline in Bristol's lead exports in the years after the introduction of the New Impositions, suggesting that in this commodity at least a significant illicit trade may have begun to develop. On the whole, however, it seems that the political clamour over the New Impositions resulted more from resentment at their questionably legal mode of introduction than any serious damage to merchant's profits.[39] Other than in the case of the few commodities which were targeted with particularly high duties, therefore, their impact on levels of illicit trade is likely to have been fairly minimal.

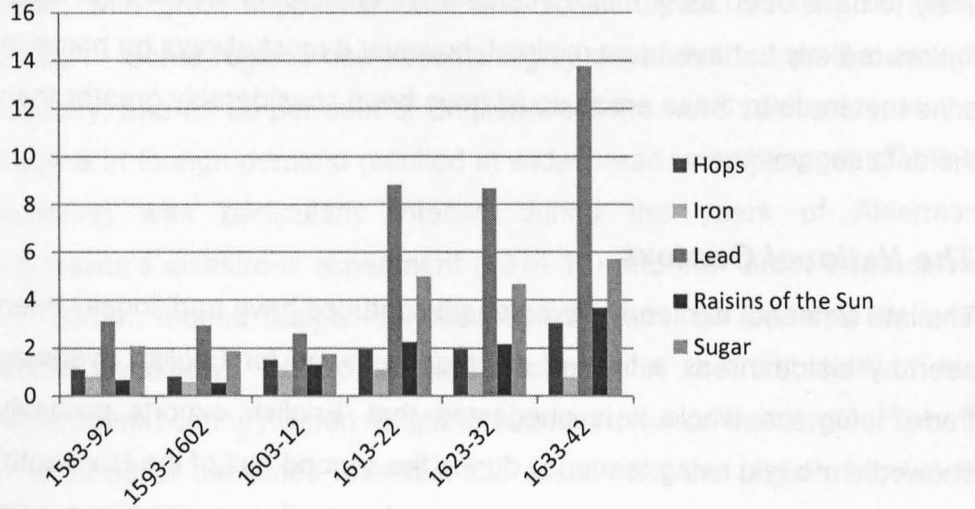

Figure 4 - Total Customs Duties Payable as a Percentage of Average Wholesale Price, 1583-1642:[40]

In addition to prohibitively high customs duties or licence costs, smuggling could also occur when merchants were legally barred from participating in potentially lucrative trades. This could happen either as a result of prohibitions on trading with the enemy during wartime, or when

[39] Croft, 'Fresh Light on Bate's Case'.
[40] Rogers, *History of Agriculture and Prices, pp. 302, 477, 504;* Willan, *Tudor Book of Rates*; '1604 Book of Rates'; '1612 Book of Rates', '1635 Book of Rates'. To avoid year to year fluctuations in price, Rogers' averages for the decade have been used.

the Crown had granted the monopoly of a trade to a particular group of merchants. With the increased desperation of the Stuart monarchs to make money by any means, including the sale of monopolies, this is something which became more of a problem in the early seventeenth century. Specific contexts where smuggling is likely to have had a more significant impact on the figures will be considered at the appropriate point in the text. Some monopolies, such as those of the East India Company, The Merchant Adventurers (Netherlands), or the Muscovy Company, are unlikely to have been broken by Bristol's merchants. Geographical reasons or the high capital investment required for long distance trades would have meant that Bristolians had little interest in trade to these regions. Other monopoly protected regions, such as those of the Levant and Virginia companies, would, however, have proved more of a temptation. At this stage in Bristol's commercial history these are still likely to have been fairly minor interests, so the impact on the Port Book figures is likely to have been minimal, however it must always be borne in mind that trade to these areas could have been considerably greater than the data suggests.

The National Context

The late sixteenth and early seventeenth centuries have traditionally been seen by historians as a time of crisis and change for English overseas trade.[41] On the whole it is suggested that 'English exports probably showed a modest rising tendency during the second half of the [sixteenth] century', although difficulties in the regular trading connections with Antwerp meant that alternative markets had to be found, and, following the violent fluctuations seen in the mid-century, the rapid expansion which had characterised the first half century of Tudor rule was never recaptured.[42] Although the opening years of the seventeenth century are usually thought of as being relatively prosperous, after 1614 the market

[41] B. E. Supple, *Commercial Crisis and Change, 1600-1642: A Study in the Instability of a Mercantile Economy* (Cambridge, 1949); Astrid Friis, *Alderman Cockayne's Project and the Cloth Trade: The Commercial Policy of England in Its Main Aspects, 1603-1625* (Copenhagen, 1927); Charles Wilson, *England's Apprenticeship, 1603-1763* (London, 1965; 2nd ed., London, 1984), pp. 52-57.

[42] R. Davis, *English Overseas Trade, 1500-1700*, (London, 1973), pp. 11-19.

for English broadcloth on the continent went into steep decline.[43] London's broadcloth exports fell sharply from 127,000 cloths in 1614 to 88,000 in 1616. Although exports fluctuated to some extent over the next quarter of a century, they continued to struggle, with 1640 seeing just 86,000 cloths exported from the capital.[44] The causes of this decline have been much debated, although it seems likely that as significant part was played by disruption of continental markets as a result of the thirty years war, as well as a rise in foreign competition as a result of a temporary prohibition on exports of unfinished cloth.[45] Since broadcloth had long been the mainstay of England's export trade, comprising as much as four-fifths of England's exports, the ensuing crisis in the broadcloth market ushered in a quarter of a century of stagnation, with English exports only just recovering their 1614 levels by the eve of the Civil War.[46] The significance of this decline in the broadcloth trade is clear, with great impoverishment and social unrest resulting in many areas.[47] Some regions had become highly dependent on the broadcloth industry, and as 50 per cent of English woollens were sold overseas the decline in foreign demand resulted in widespread unemployment.[48] This suffering was particularly intense during the years of Alderman Cockayne's disastrous experiment (1614-17) and the 'Great Depression' of 1620-4. Indeed Supple has described the latter as 'perhaps the most acute breakdown of the English economy in the first half of the seventeenth century' when 'England seemed to be on the verge of ruin'.[49] The mood of the times reflected this crisis, with the plight of the cloth industry becoming a major issue in Parliament and a dominant concern of the broader body politic. Many blamed the Crown and its interference in

[43] Ramsay, *English Overseas Trade*, pp. 25-33; Supple, *Commercial Crisis*, pp. 23-131; and F.J. Fisher, 'London's Export Trade in the Early Seventeenth Century', *Economic History Review*, 2nd ser., III, No. 2 (1950), pp. 152-155.
[44] Fisher, 'London's export trade', p. 153.
[45] For consideration of the causes of this depression see: J.D. Gould, 'The trade Depression of the early 1620s' *Economic History Review*, (1954), pp. 81-90; Supple, *Commercial Crisis*, pp. 52-96. The prohibition was part of an ill-fated experiment, proposed by Alderman Cockayne, attempting to foster an English cloth finishing industry by banning all exports of un-dyed broadcloth.
[46] Fisher, 'London's Export Trade', pp. 151-161; Supple, *Commercial Crisis*, p. 20 and pp. 136-137; and Millard, 'The Import Trade of London', p. 216.
[47] Supple, *Commercial Crisis*, pp. 33-131.
[48] Supple, *Commercial* Crisis, p. 3; Davis, *English Overseas Trade*, p. 8.
[49] Supple, *Commercial* Crisis, pp. 52, 56.

foreign trade for the crisis (particularly singling out the granting of royal monopolies and the exaction of Impositions), and the resulting tensions certainly contributed to the breakdown of relations between the King and Parliament in the 1640s.[50]

In spite of difficulties in the broadcloth trade, the picture was not an entirely negative one for English commerce in the early seventeenth century. To an extent, exports of the New Draperies replaced the lost broadcloth exports, and new markets were opened in the Mediterranean, East Asia, and across the Atlantic.[51] In addition, some historians have highlighted the relative prosperity of England's import trades during these years. Brenner in particular has suggested that 'the new English import trades were able to prosper at the very time that the traditional cloth trades were languishing', with an 'import boom' occurring in the second quarter of the seventeenth century, precisely at 'the time of greatest crisis in the cloth export trade'.[52] London's imports grew significantly over this period, rising from £1,000,000 in 1600 to £3,000,000 in 1640.[53] Brenner argued that the reason for this expansion in the face of apparent adversity was the strength of English agriculture. Falling food prices resulted in increased disposable income amongst the middle and lower classes, meaning that a consumer culture began to develop in England during these years; the predominance of luxury goods such as silk cloths and exotic foodstuffs among English imports is certainly notable.[54] On the whole, however, the general perception is still that the pre-Civil War years were a difficult time for English overseas commerce and the industries which depended on it.

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[50] Supple, *Commercial Crisis*, pp. 58-9, 60-3, 71; L. Stone, *The Causes of the English Revolution 1529-1642* (London, 1972), p. 68; C. Hill, *The Century of Revolution 1603-1714*, (Surrey, 1980); Hill, *The English Revolution 1640*, (London, 1979), pp. 30-44.

[51] Ralph Davis, *The Rise of the Atlantic Economies* (London, 1973), pp. 202-209; and Ramsay, *English Overseas Trade*, pp. 34-131. The 'New Draperies' were lighter varieties of cloth (such as says, bays and serges) which were much in demand in southern Europe and the Mediterranean during this period.

[52] R. Brenner, *Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Traders, 1550-1653*, (London, 2003), pp. 39, 41.

[53] Millard, 'The Import Trade of London' p. 316.

[54] Brenner, *Merchants and Revolution*, pp. 39-45.

The conventional version of events is, however, based almost exclusively on evidence from London. As the capital was responsible for perhaps three-quarters of the nation's trade in these years, historians have often tacitly assumed that trends observed at London can be taken as representative of the country as a whole.[55] This idea has been supported by the few general surveys of the outports at this time, which again indicate that trade stagnated and even declined in the pre-Civil War era.[56] These surveys are, however, affected by the prevailing London-centric view of seventeenth century English commerce which assumes that broadcloth exports can be used as a proxy for overseas trade as a whole. This approach ignores the possibility that the trade of provincial ports such as Bristol, may have been less reliant on broadcloth than was the case with London's trade and that their commerce may actually have been driven by a range of other commodities. As London's virtual monopoly of the broadcloth trade had been central to its commercial ascendance in the sixteenth century, the outports are likely to have been less affected by the subsequent broadcloth crisis. It may also be the case that as the focus of England's trade shifted away from the Netherlands, some outports may actually have come to enjoy advantages over London, both as a result of their closer proximity to these new markets as well as the availability of alternative export commodities in their surrounding regions. In short, it is dangerous to assume that the experience of the outports necessarily mirrored that of London.

Previous Approaches to Bristol's Trade

Although several historians have written about Bristol's trade in the late sixteenth and early seventeenth centuries there is a surprising lack of consensus on how it was faring. The views of many have been negative, perhaps influenced by perceptions that London's success in the cloth trade had been to the detriment of the smaller ports.[57] Other views, have

[55] This assumption is acknowledged in Supple, *Commercial Crisis*, p. 7; and Fisher, 'London's Export Trade', p. 152. Many other works assume that London was representative of the country as a whole without acknowledging it specifically.
[56] Friis, *Alderman Cockayne's Project*, 115-130; and W.B. Stephens, 'The Cloth Exports of the Provincial Ports, 1600-1640', *Economic History Review*, 2nd ser., XXII, No. 2 (1969), pp. 228-248.
[57] This is particularly true of G.D. Ramsay; see Ramsay, *English Overseas Trade*, pp. 132-2.

however, been much more positive. Far from being in crisis, Patrick McGrath has suggested that Bristol's trade may even have been flourishing in the years before the Civil War.[58] This inconsistency in interpretations can perhaps best be explained by the relatively thin source base that had previously been used. Either unable or unwilling to delve into the detailed evidence provided by the Port Books, previous studies have tended to rely on potentially unreliable qualitative sources, or methods of sampling the data which may obscure the true picture. A detailed examination of all of the available statistical information is, therefore, certainly justified to bring some clarity to this picture.

For the late sixteenth century, the best study to date is that of Jean Vanes who devoted her PhD thesis and several subsequent publications to Bristol's development as a port during the Tudor years.[59] Vanes' study took in a wide range of sources, and covered many different aspects of commercial life in the city. Perhaps most interesting in terms of the evolution of Bristol's trade, however, is her examination of the Enrolled Accounts. Based on these customs figures she tracked the fortunes of Bristol's cloth, wine, and poundage paying trades across the sixteenth century.[60] From these figures Vanes concluded that 'during Elizabeth's reign, the cloth trade showed a marked decline' to the extent that 'Bristol could hardly claim to be a major cloth exporting town by the end of the century'.[61] She suggested a number of potential reasons for this decline, including political tensions in France and Spain, competition with London merchants, and lack of demand for the heavy broadcloths in Bristol's warmer southern markets. The other trades, however, told a more positive story. The wine trade had shown a clear decline in the 1560s and 70s (possibly as a result of increased smuggling, as well as conflicts with France and Spain), but wine imports had begun to pick up again

[58] P. McGrath (ed.), *Merchants and Merchandise in Seventeenth-Century Bristol*, Bristol Record Society vol. XIX, (1955), p. xix.
[59] J.M. Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century', *Unpublished PhD Thesis, University of London* (1977); Vanes, *The Port of Bristol*; J.M. Vanes (ed.), *Documents Illustrating the Overseas Trade of Bristol in the Sixteenth Century*, Bristol Record Society vol. XXXI, (1979).
[60] Vanes, *The Port of Bristol*, pp. 21-6. Vanes, 'The Overseas Trade of Bristol', pp. 124-132.
[61] Vanes, *The Port of Bristol*, pp. 22-3.

towards the end of the century. Indeed Vanes suggested that 'unlike that of the cloth trade, the position of the wine trade looked reasonably hopeful in 1600 ... given an early peace with Spain the wine trade could quickly return to something like its former prosperity'.[62] A similar pattern occurred with the miscellaneous goods paying poundage. Although imports of these were below average in the 1560s and 70s, Vanes noted an 'apparent increase in both imports and exports in the last decade of the century', which may have been even greater if the potential effect of increased smuggling during the Anglo-Spanish War is taken into account.[63] Overall she concluded that 'if there was a sixteenth century crisis in Bristol's trade it probably came at the mid-century and mainly in the 1560s'; 'although the Bristol cloth trade was suffering a very severe slump at the end of the century, the demand [from the Mediterranean] for weapons and foodstuffs, allowed Bristol merchants to maintain a comparatively steady level of trade during the war years of the 1590s'.[64]

This relatively hopeful story is continued into the early years of the seventeenth century by the work of Patrick McGrath. Indeed he suggested that Bristol's merchants prospered in the first four decades of the century to the extent that 'the expansion of their trade may well have made them at heart kindly disposed towards a government which gave them peace and prosperity' in spite of numerous attempts by Crown agents to curtail the city's illicit trade.[65] Although there were a number of setbacks, such as war with first France and then Spain from 1625 to 1630, McGrath describes the period in general as one of expansion, with Bristol's trade less severely affected than that of London by the general depression of the early 1620s. In particular he singled out the 1630s as a decade of prosperity for Bristol, with its traditional trades with Ireland, France, and the Iberian Peninsula flourishing, as well as a variety of new markets being explored.[66]

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[62] Vanes, *The Port of Bristol*, p. 24.
[63] Vanes, *The Port of Bristol*, p. 25.
[64] Vanes, *The Port of Bristol*, pp. 25-6.
[65] McGrath, *Merchants and Merchandise*, p. xix.
[66] McGrath, *Merchants and Merchandise*, pp. xix-xxi.

Although McGrath's conclusions about the development of Bristol's trade in the early seventeenth century are in many ways the closest to those of this study, he was unfortunately unable to provide firm statistical evidence to back them up. McGrath's extensive works on life and commerce in the city would undoubtedly have given him a great insight into the fortunes of Bristol's merchant community; however, he wrote that 'the overseas trade of Bristol is too big a subject to examine in detail'.[67] In the absence of a detailed statistical analysis, his conclusions about the development of Bristol's trade were based largely on a relatively simple count of the number of ships entering and exiting Bristol as recorded in the surviving Port Books.[68] As McGrath himself recognised, this approach takes no account of the size of the ships or the relative value of the cargo they carried, so it is not possible to put too much weight on such findings. Indeed, an increase in the number of ships could even conceal a decline in the value of trade if, for example, merchants were employing smaller ships. Equally, as Ralph Davis noted, shipping tonnages should not be assumed to equate to trade values, as the transport of low value bulk cargoes required a great deal of shipping.[69] In the case of early seventeenth-century Bristol, the most notable example of this is the Irish trade. This consisted primarily of high volumes of low value goods on relatively small ships, and thus its importance is greatly exaggerated by McGrath's figures (as he himself admitted). For these reasons, while McGrath's results are interesting for their positive portrayal of the state of Bristol's trade, it would be unwise to conclude too much from them without further supporting evidence.

In contrast to the fairly positive views of McGrath, G.D. Ramsay (writing just two years later) was much more negative about the health of Bristol's trade in the late Tudor and early Stuart years. Although in his study of 'The Rise of the Western Ports' he suggested that 'the first major stirrings'

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[67] McGrath, *Merchants and Merchandise*, p. xix.
[68] McGrath, *Merchants and Merchandise*, pp. xix-xxi and 279-81.
[69] R. Davis, *The Rise of the English Shipping Industry in the 17th and 18th Centuries* (London, 1962; reprint, Newton Abbot, 1972), pp. 175-198.

were at 'Bristol in the seventeenth century', he said of the later sixteenth century that 'Bristol was then a decaying cathedral city that had slipped out of contact with the major currents of European trade'.[70] In his view Bristol's renaissance did not begin until after the Restoration when commerce with the American colonies took off. Ramsay described the reigns of Elizabeth I and James I as a 'dark epoch' and 'the lowest ebb in the trade of Bristol' with the city struggling even to muster its quota of ships for national service.[71] He suggested a number of reasons for this decline, with 'the most devastating blow [being] the nineteen years war with Spain, 1585-1604' although the increasing depredations of Barbary pirates, and growing power and influence of London merchants also played an important part.[72]

Ramsay did make some limited use of a Port Book from 1622, suggesting that, following the decline of its broadcloth trade, it was only the foreign demand for lead which prevented Bristol from becoming completely moribund as an international commercial centre. The evidence he derived from this examination was, however, largely anecdotal.[73] In place of statistical evidence he examined a range of qualitative sources, most notably various complaints and petitions presented to the Crown by Bristol's merchants.[74] While the tales told by these documents are certainly pitiable, it must be remembered that such complaints were almost invariably found in the preambles of petitions put forward by the city in the hope of gaining preferential treatment from the Crown. They therefore had a vested interest in presenting their condition in the worst light possible. These sources thus need to be treated with extreme caution; much of what they describe was often a dramatic exaggeration of the situation, or even a complete fabrication.

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[70] Ramsay, *English Overseas Trade*, p. 134.
[71] Ramsay, *English Overseas Trade*, pp. 136-7.
[72] Ramsay, *English Overseas Trade*, pp. 136-40.
[73] Ramsay, *English Overseas Trade*, pp. 140-1. The Port Book cited by Ramsay (1135/2) appears to be a return of the Collector of New Impositions for Bristol from Easter to Michaelmas1622, and is only 6 folios in length.
[74] Ramsay, *English Overseas Trade*, pp. 137-9. An example of such a petition (probably dating from 1619) can be seen in P. McGrath (ed.), *Records Relating to the Society of Merchant Venturers of the City of Bristol in the Seventeenth Century*, Bristol Record Society vol. XVII (Bristol, 1952), pp. 182-4.

W.B. Stephens also viewed Bristol's early seventeenth century trade in a negative light, questioning McGrath's suggestion that 'the "position of Bristol as the second port in the kingdom was not challenged in the seventeenth century, for it far outstripped its nearest rivals, Exeter, Hull, and Newcastle" and that the "sixteen thirties ... were prosperous for the port"'.[75] The core of Stephens' argument was a detailed examination of the Bristol New Impositions returns. From these figures he concluded that Bristol's imports and exports suffered a 'steady decline' from about 1611/12, reaching 'an abysmally low level in the period 1625-9' before a 'partial and hesitant recovery in the 1630s'.[76] As has already been discussed, as they only covered a proportion of the commodities traded through Bristol, and because the rate of duty was not related in any way to the retail value of the goods (see pp. 17-20 above) the New Imposition returns alone cannot be used as a reliable measure of the state of Bristol's trade. To support his conclusions Stephens also employed recorded complaints from Bristol merchants in the 1620s.[77] These were the same sources used by Ramsay and, as has already been remarked, they simply cannot be relied upon to present an unbiased impression of the state of Bristol's trade.

The most recent and also the most detailed study of Bristol's overseas trade in the period covered by this chapter is that of D.H. Sacks. He attempted to assess the development of Bristol's overseas trade over the course of the late sixteenth and early seventeenth centuries by comparing data taken from two sets of Port Books, those from the years 1575/6 and 1624/5.[78] His analysis was more sophisticated than that conducted by McGrath as, rather than simply counting the number of ships, he calculated the amount of cloth exported, wine imported, and the value of the remainder of Bristol's trade (paying poundage). From this Sacks concluded that 'the general impression is that by the mid-1620s

[75] Stephens, 'Trade Trends', p. 156.
[76] Stephens, 'Trade Trends', p. 157.
[77] Stephens, 'Trade Trends', p. 158.
[78] Sacks, *Widening Gate*, pp. 36-48.

the value of Bristol's trade had grown considerably from its level in the middle of Elizabeth's reign'.[79] He did not, however, attribute much significance to the great increase in the recorded value of goods paying poundage, 'because the rates upon which the Port Books relied were twice revised upward early in James I's reign'.[80] Sacks therefore concluded that the rise in *ad valorem* duties recorded in the Port Books could be 'only illusory', and that only the wine trade could be said with confidence to have grown during this period. He was, however, over-cautious in suggesting that much of the apparent increase could be explained by revisions to the Book of Rates. As has already been shown (see pp. 22-25 above) the customs rates were only in fact revised on one occasion during this period (in 1604) and this would only have led to an increase in duty collected of around 20 per cent. As Sacks' figures show, however, the value of goods paying poundage at Bristol increased by 380 per cent between 1575/6 and 1624/5.[81] It is clear, therefore, that the vast majority of this increase represented a genuine growth of trade, rather than a statistical illusion caused by the impact of inflation on the customs duties.

The Health of Bristol's Trade – A Reassessment

As Vanes has suggested, the Port Book figures show that if Bristol's overseas trade did experience a sixteenth-century crisis this was in the 1560s.[82] Bristol's imports had been £21,600 in 1550/1 and exports £14,300, but in 1563/4 these had dropped to just £12,500 and £7,700 respectively (see Figure 5). The decline was even more serious than these figures would suggest, as to account for inflation of the customs duties in the wake of the 1558 revisions the 1550/1 figures should be doubled to allow an accurate comparison.[83] Conversely, however, it is also highly likely that Bristol saw an upsurge in illicit trade as a result of

[79] Sacks, *Widening Gate*, p. 41.
[80] Sacks, *Widening Gate*, p. 376.
[81] The combined value of imports and exports paying poundage at Bristol rose from £14,500 in 1575/6 to £55,000 in 1624/5 Sacks, *Widening Gate*, pp. 39, 43).
[82] Vanes, *The Port of Bristol*, p. 25.
[83] The rates were increased by roughly 118% in 1558 (see Willan, *Tudor Book of Rates*, pp. xxvii-xxviii.).

the 1558 increases in duties, so it may be that the picture painted by the Port Books is somewhat more gloomy than was really the case.

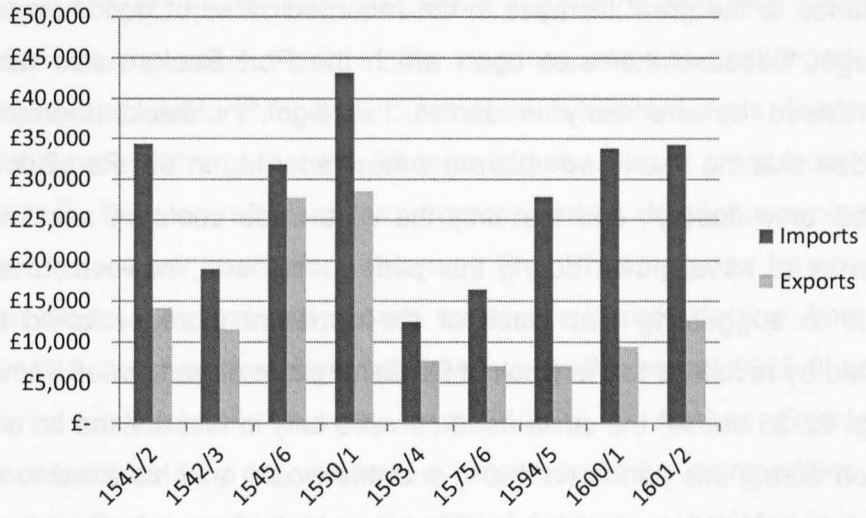

Figure 5 - Bristol's Overseas Trade as Recorded in the Port Books, 1541/2-1601/2:[84]

Declared trade remained relatively low in the 1570s, with imports of £16,400 and exports of £7,000 recorded in 1575/6, however by the 1590s Bristol appears to have been well on the way to recovery. Imports were up to £27,900 in 1594/5 and in the early years of the seventeenth century they remained healthy at £33,800 in 1600/1 and £34,300 in 1601/2. This expansion is borne out by the Enrolled Accounts, which show imports to have grown from an average of just £13,000 per annum in the 1560s to almost £22,000 in the 1590s, and £32,500 in the opening years of the seventeenth century (see Figure 6). Initially at least Bristol's exports do not appear to have shared in this expansion remaining at £7,000 in 1594/5, although following the turn of the century these too appear to have picked up, with £9,400 being recorded in 1600/1 and £12,700 the following year.

[84] Sources: http://hdl.handle.net/1983/1299; http://hdl.handle.net/1983/1300; http://hdl.handle.net/1983/1301; http://hdl.handle.net/1983/1302; http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; TNA PRO E190/1133/1. See Appendix 1.1. The figures for 1550/1 and earlier have been doubled to adjust for changes to the customs duties.

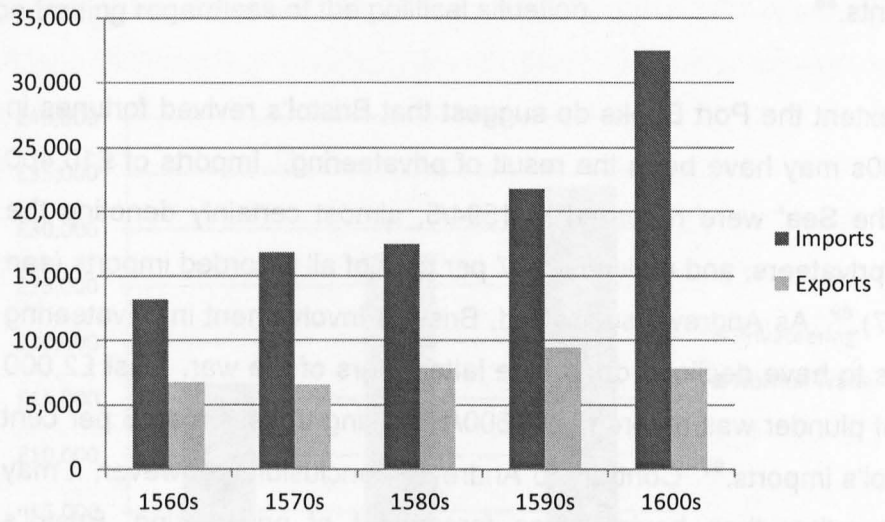

Figure 6 - Decade Averages for the Value of Bristol's Trade Recorded in the Enrolled Accounts, 1560-1603:[85]

This phase of growth in the 1590s is particularly notable as it coincides with the Anglo-Spanish War (1585-1604). Many historians have previously assumed that the war impacted negatively on Bristol's commerce, so this apparent prosperity marks a clear contrast. Ramsay described the conflict as 'the most devastating blow from which [Bristol's trade] suffered', reducing its main field of overseas commerce to the western ports of France.[86] Kenneth Andrews also felt that the war was detrimental to Bristol and its trade. Although initially many of the city's merchants took advantage of the conflict to launch privateering ventures, Andrews has suggested that 'there was a pronounced decline not only in Bristol privateering but in Bristol shipping and trade generally during the war'.[87] In his view privateering was 'merely a substitute for trade, employing the ships of Bristol... that would normally have plied to the Iberian ports', and as the war progressed Bristol was forced out of even

[85] TNA PRO, E356/28-29. See Appendix 1.2.
[86] Ramsay, *English Overseas Trade*, pp. 136-7.
[87] K. Andrews, *Elizabethan Privateering: English Privateering During the Spanish War 1585-1603*, (Cambridge, 1964), p. 141.

this activity by the superior finance and larger ships of London merchants.[88]

To an extent the Port Books do suggest that Bristol's revived fortunes in the 1590s may have been the result of privateering. Imports of £10,400 from 'The Sea' were recorded in 1594/5, almost certainly denoting the take of privateers, and making up 37 per cent of all recorded imports (see Figure 7).[89] As Andrews suggested, Bristol's involvement in privateering appears to have declined during the latter years of the war. Just £2,000 worth of plunder was recorded in 1600/1, making up less than 6 per cent of Bristol's imports.[90] Contrary to Andrews' conclusions, however, it may be that rather than having been forced out of privateering, Bristol's merchants simply neglected it. The 1600/1 figure shows that Bristol's import trade had continued to grow in spite of the 'loss' of gains from privateering. It may be, therefore, that the illicit resumption of their regular Spanish trade may have simply proved a more profitable opportunity for Bristol's merchants than the risky business of privateering. Work by Pauline Croft has suggested that the cessation of commercial ties with Spain during the conflict may have been less complete than has previously been assumed, with a considerable illicit trade developing between the two warring parties.[91] This included trading through entrepôts such St. Jean de Luz on the French/Spanish border, or La Rochelle further up France's Atlantic coast. Alternatively, ships were also sometimes prepared to run the risk of seizure and trade directly with Spain, often with the collusion of local officials or disguised as neutral Irish or Scottish vessels. The evidence for Bristol's continued connections with Spain during the Anglo-Spanish War will be discussed more fully in the next chapter. Overall, however, it certainly seems that the war proved only a minor hindrance to Bristol's merchants, with the

[88] Andrews, *Elizabethan Privateering*, pp. 140, 229.
[89] http://hdl.handle.net/1983/1307.
[90] http://hdl.handle.net/1983/1308.
[91] P. Croft, 'Trading with the Enemy 1585-1604, *The Historical Journal,* Vol. 32, No. 2 (June, 1989), pp. 281-302.

prosperity of their Spanish trades providing sufficient temptation to carry on trading regardless of the political situation.

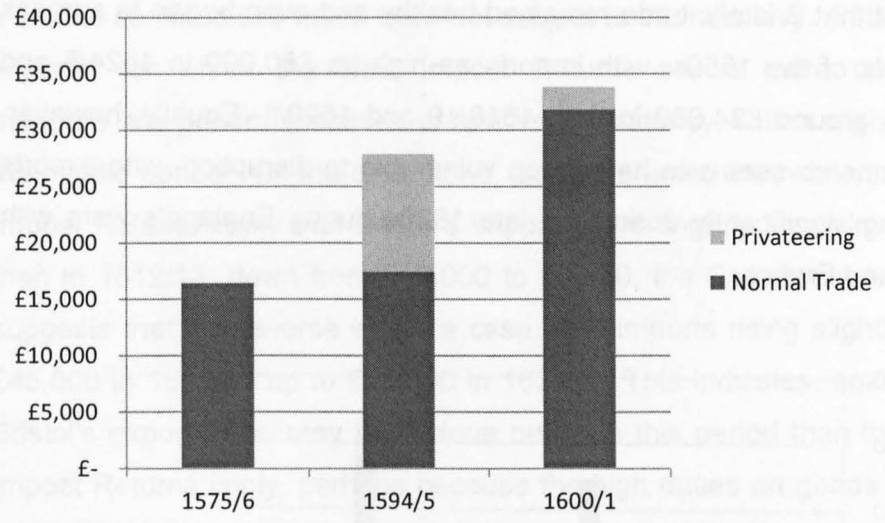

Figure 7: Privateering's Contribution to Bristol's Imports, 1575-6-1600/1:[92]

The late sixteenth century rise in Bristol's recorded trade is also particularly notable as it predates the 1604 reassessment of the Book of Rates, and so must represent a genuine increase in trade declared at the customs house rather than an increase in duties. As he examined just two Port Books (from 1575/6 and 1624/5), Sacks was unaware of this phase of expansion, possibly explaining in part why he assumed that the growth in Bristol's trade he witnessed could be merely a statistical illusion.[93]

Although the Enrolled Accounts cease in 1604, the Port Books show that Bristol's trade remained healthy during the opening years of James I's reign. Recorded imports were as high as £44,500 in 1612/13. Exports too had climbed significantly, reaching £27,500 in 1608/9 and more than £36,000 in 1611/12 (see Figure 8). At the very least, this suggests that Bristol shared in the prosperity of the country as a whole during these

[92] Sources: http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308. See Appendix 2.3.
[93] Sacks, *Widening Gate,* p. 376.

'twelve good years of James I'.[94] Unfortunately, records are relatively sparse for the next few decades, with only five usable sets of Port Book data surviving between 1614 and the late 1630s. On the whole, these suggest that Bristol's trade remained healthy and even began to surpass its levels of the 1550s, with imports as high as £50,000 in 1624/5 and exports around £34,000 in both 1618/19 and 1620/1. Equally, however, its commerce seems to have been vulnerable to disruption, with exports dropping significantly during the late 1620s during England's wars with Spain and France.

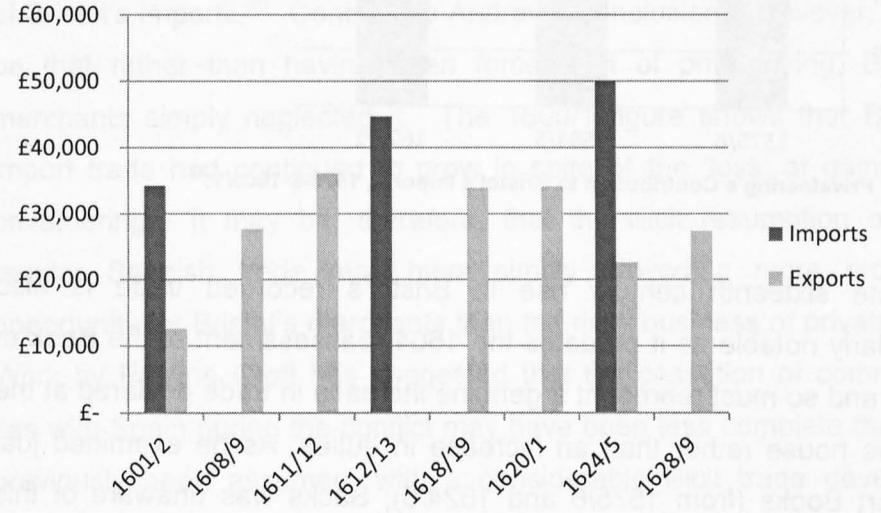

Figure 8 - Bristol's Overseas Trade as Recorded in the Port Books, 1601/2-1628/9:[95]

The New Impost Returns do provide a continuous series of data between 1610 and 1635 (see Figure 9), although as has already been discussed (see pp. 17-20) their value as a measure of overall trade is dubious. As Stephens argued, they imply that Bristol's exports declined during the 1610s and did not show any marked signs of recovery over the following fifteen years.[96] As a result, for example, the returns for 1620/1 are only about half those of 1611/12 (£19,000 down to £10,000). The Port Books, however, which recorded duties paid on all exports, suggest that Bristol's

[94] Millard, 'Import Trade of London', p. 111.
[95] Sources: TNA PRO E190/1133/1; E190/1133/8; E190/1133/11; E190/1134/3; E190/1134/11; E190/1136/1. See Appendix 1.1. The import figures from 1608/9 and 1620/1 have been omitted from the graph, as wine was not recorded in those years resulting in an artificially low total. Recorded imports of all other goods were £33,300 in 1608/9 and £34,600 in 1620/1.
[96] Stephens, 'Trade Trends', p. 157.

import trade in the latter year (£34,000) was almost equal to the former, when exports had been £36,000. This implies that rather than a genuine decline in trade, the fall in the New Impost Returns may merely represent a shift to commodities which were not subject to the new levy. In terms of imports, for which the New Impost Returns are a more complete measure, the general picture is of relative consistency, with a slight dip in the middle period. On the other hand, it may be noted that while the New Impost Returns imply that Bristol's imports were slightly lower in 1624/5 than in 1612/13, down from £10,000 to £8,000, the Port Book evidence suggests that the reverse was the case, with imports rising slightly from £45,000 in 1612/13 up to £50,000 in 1624/5. This indicates, again, that Bristol's export trade may have done better in this period than the New Impost Returns imply, perhaps because the high duties on goods paying Imposition reduced the profitability of trades in those commodities and induced merchants to shift towards goods subject to lower taxes to make up their consignments.

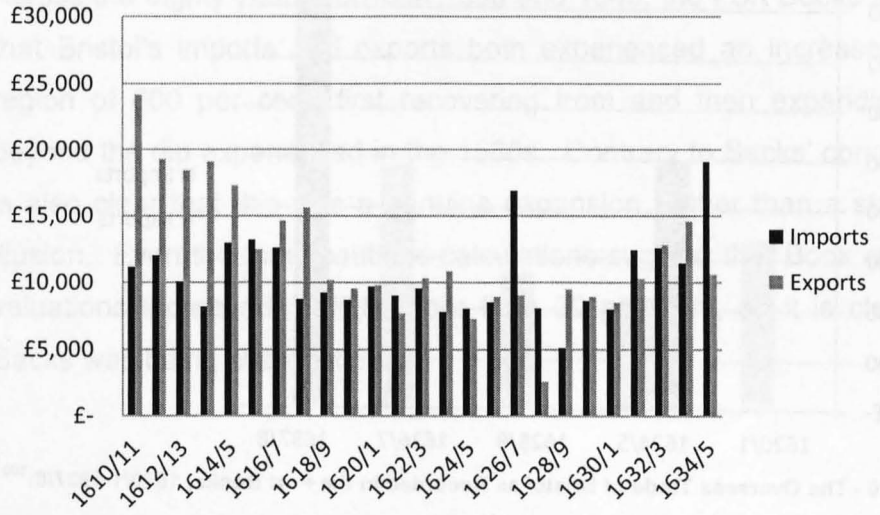

Figure 9 - New Imposition Returns for Bristol, 1610/11-1634/5:[97]

During the later 1630s, evidence from the Port Books clearly shows that Bristol's trade was expanding once again (see Figure 10). Imports in

[97] Source: TNA PRO, E351/797-821. See Appendix 1.3. These are the figures for imports and exports as they appear in the New Impositions Returns. They consist of the value of the goods as set down in the Book of Rates, although this is a separate impost valuation which was usually different than the poundage valuation.

1637/8 had reached almost £83,000, while exports the previous year were in excess of £48,500. It is difficult to establish the general state of trade with figures from just two years as, for example, a delay of just a month in the arrival of the wine fleet could have a significant impact on the value of trade recorded in a calendar year.[98] The New Impost Returns, however, do provide some support (see Figure 11). Unfortunately, these figures cannot be compared to the pre-1635 evidence because the New Imposition rates were significantly revised in 1635 as Charles I strove ever more desperately to keep his finances afloat.[99] The data from 1635-40 does, however, show that trade was relatively consistent during these years. While the import returns for 1637/8 were good, they were not exceptionally so, and those for 1636/7 were also unexceptional compared to the surrounding years. This would certainly suggest that the surviving Port Books from the late 1630s have not given a false impression and that the excellent trading conditions they reflect were genuine.

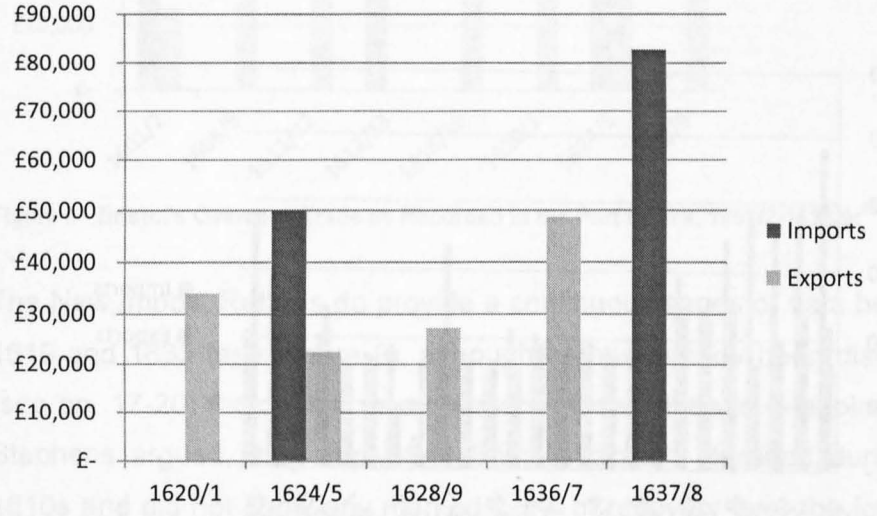

Figure 10 - The Overseas Trade of Bristol as Recorded in the Port Books, 1620/1-1637/8:[100]

[98] Standard deviation analysis of figures from the second half of the sixteenth century, a period for which the Enrolled Accounts provide a more continuous series, gives some indication of the scale of these year-to-year fluctuations. On average, total imports and exports for a year deviated by between 6 and 20 per cent from the decadal average: 1560s standard deviation = 19.29%; 1570s = 9.92%; 1580s = 6.42%; 1590s = 20.54 per cent; and 1600s = 8.65 per cent (based on an analysis of TNA/PRO, E356/28-29). While these figures suggest that the gross value of trade in any given year could be substantially different from those around it, even reducing the figures from the 1630s by the maximum value suggested here of 20 per cent, it is still clear that Bristol's trade had undergone a noteworthy growth.

[99] Stephens, 'Trade Trends', p. 159.

[100] Sources: TNA PRO E190/1134/11; E190/1136/1; E190/1136/8; E190/1136/10; Sacks, *Widening Gate*, pp. 42-3. See Appendix 1.1.

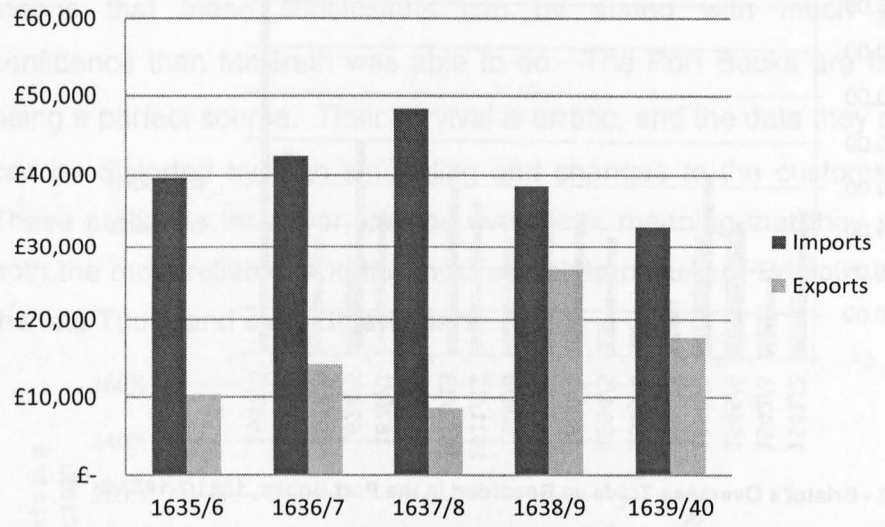

Figure 11 - Bristol's New Imposition Returns, 1635-40:[101]

Conclusions

Over the period as a whole, even when incorporating a significant margin for error it is clear that Bristol's trade expanded considerably (Figure 12). Across the eighty years between 1560 and 1640, the Port Books suggest that Bristol's imports and exports both experienced an increase in the region of 600 per cent, first recovering from and then expanding well beyond the dip experienced in the 1560s. Contrary to Sacks' concerns, it is also clear that this was a genuine expansion, rather than a statistical illusion. Even the most cautious calculations suggest that Book of Rates valuations increased by little more than 20 per cent, so it is clear that Sacks was being overcautious.

[101] Source: TNA PRO, E351/822-826. See Appendix 1.3. These are the figures for imports and exports as they appear in the New Impositions Returns.

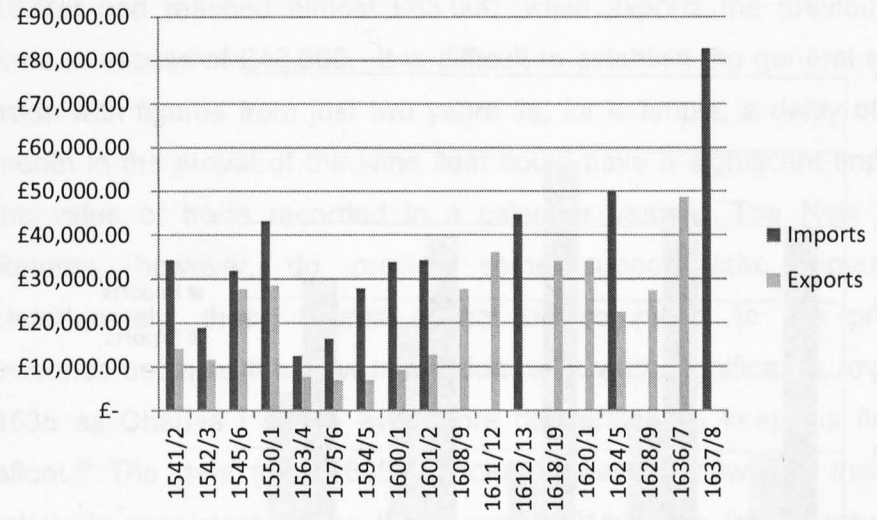

Figure 12 - Bristol's Overseas Trade as Recorded in the Port Books, 1541/2-1637/8:[102]

This picture differs greatly from the negative impression of Bristol's trade in these years given by previous historians such as Ramsay and Stephens. Again this highlights the hazards of relying on solely qualitative sources, or using less than ideal statistical evidence. Those writing about trade in the Early Modern period often did so with an agenda, and so cannot be treated as reliable witnesses. The petitions quoted by Ramsay, for example, were trying to extract concessions from the Crown and thus presented Bristol's trade in a negative light, even at times when the more concrete evidence from the Port Books shows it to have been prospering. Statistical sources too must be handled with care. In particular the New Imposition Returns do not give a representative picture of trade as a whole, as they only applied to a select range of commodities and did not tax all goods equally. Indeed analysis of the Port Books has shown that even at times when trade as a whole was rising, the New Impositions could show a decline as merchants switched to goods paying lower duty. In many ways the conclusions of this study are much the same as those of McGrath, who suggested that Bristol's trade was prosperous in the early seventeenth century, and in the 1630s

[102] Sources: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate,* pp. 42-3; TNA PRO E190/133/1; E190/1133/8; E190/1133/11; E190/1134/3; E190/1134/10; E190/1134/11; E190/1136/1; E190/1133/3; E190/1133/8; and E190/1133/10. See Appendix 1.1.

in particular. The greater body of data which is now available, however, means that these conclusions can be stated with much greater confidence than McGrath was able to do. The Port Books are far from being a perfect source. Their survival is erratic, and the data they contain can be distorted by both smuggling and changes to the customs rates. These problems, however, can be overcome, meaning that they provide both the most reliable, and the most complete picture of Bristol's trade in the late Tudor and early Stuart years.

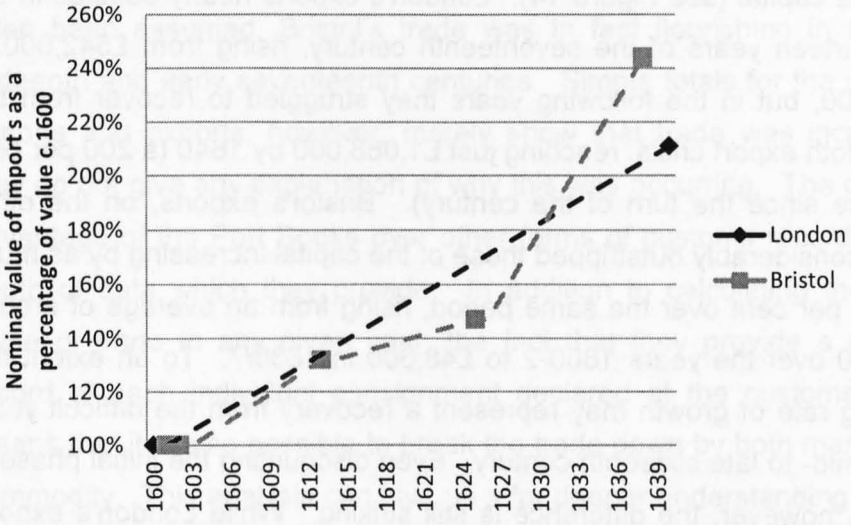

Figure 13 - Rates of Expansion at London and Bristol, 1600-1640 (Imports):[103]

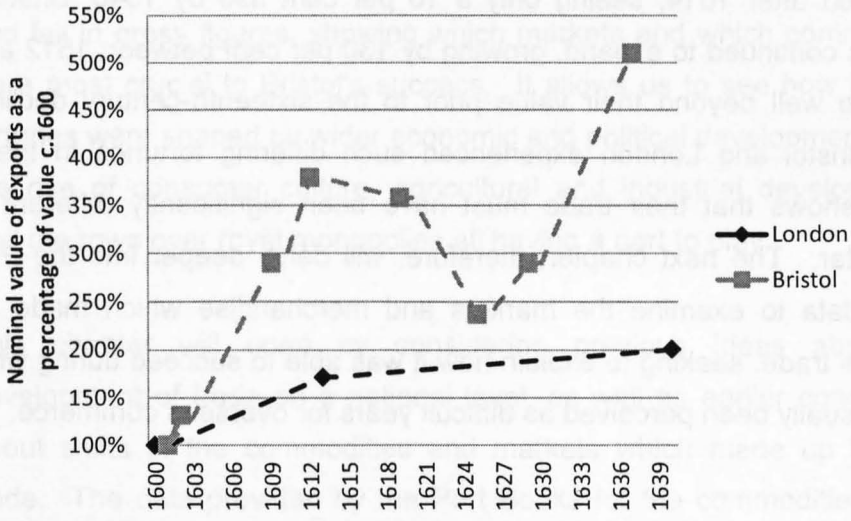

Figure 14 - Rates of Expansion at London and Bristol, 1600-1640 (Exports):[104]

[103] Sources: http://hdl.handle.net/1983/1308; TNA/PRO, E190/1133/1; E190/1134/3; E190/1136/10; Sacks, *Widening Gate*, pp. 42-3. See Appendix 1.1. The London Figures are from: Millard, 'The Import Trade of London', p. 316.

[104] Sources: http://hdl.handle.net/1983/1308; TNA/PRO E190/1133/1; E190/1133/8; E190/1133/11; E190/1134/11; E190/1136/1; E190/1136/3; and E190/1136/8; and Sacks,

As well as challenging previous interpretations of Bristol's trade, the Port Book data from early seventeenth-century Bristol also calls into question previous assumptions that trade statistics from London can be taken as representing the trade of the country as a whole in the early seventeenth century. In terms of imports the story is fairly similar, with both London and Bristol seeing roughly a two fold increase between 1600 and 1640 (see Figure 13). With exports, however, Bristol was far more successful than the capital (see Figure 14). London's exports nearly doubled in the first fourteen years of the seventeenth century, rising from £542,000 to £930,000, but in the following years they struggled to recover from the broadcloth export crisis, reaching just £1,088,000 by 1640 (a 200 per cent increase since the turn of the century). Bristol's exports, on the other hand, considerably outstripped those of the capital increasing by as much as 550 per cent over the same period, rising from an average of around £11,000 over the years 1600-2 to £48,600 in 1636/7. To an extent this startling rate of growth may represent a recovery from the difficult years of the mid- to late sixteenth century. Even discounting the initial phase of growth, however, the difference is still striking. While London's exports struggled after 1614, seeing only a 16 per cent rise by 1640, Bristol's exports continued to expand, growing by 130 per cent between 1612 and 1637 to well beyond their value prior to the sixteenth-century decline. That Bristol and London experienced such differing fortunes in these years shows that their trade must have been significantly different in character. The next chapter, therefore, will delve deeper into the Port Book data to examine the markets and merchandise which made up Bristol's trade, seeking to explain how it was able to succeed during what have usually been perceived as difficult years for overseas commerce.

Widening Gate, 42-43. See Appendix 1.1. London figures are based on: Fisher, 'London's Export Trade', p. 153.

Chapter 2:

Markets and Merchandise, 1558-1642[1]

The previous chapter has proved that, far from being in decline as has often been assumed, Bristol's trade was in fact flourishing in the late sixteenth and early seventeenth centuries. Simple totals for the value of imports and exports, however, merely show that trade was increasing; they do not give any explanation of why this was occurring. The greatest advantage of the Port Books over other forms of customs records is the depth of data which they provide. In addition to calculating the gross value of trade in any given year, the fact that they provide a detailed record of each individual consignment declared at the customs house means that it is also possible to break the trade down by both market and commodity. This analysis can give us a far deeper understanding of what was driving Bristol's trade than can be gained by simply tracking the rise and fall in gross figures, showing which markets and which commodities were most crucial to Bristol's success. It allows us to see how Bristol's fortunes were shaped by wider economic and political developments, with the rise of consumer culture, agricultural and industrial developments, and the rows over royal monopolies all having a part to play.

This chapter will open by considering previous ideas about the development of trade on a national level, as well as earlier conclusions about shifts in the commodities and markets which made up Bristol's trade. The data provided by the Port Books for the commodities which made up Bristol's trade will then be examined in greater depth. Using this data, Sacks' theory that Bristol's trades were becoming more 'import

[1] This chapter expands on research which was published in my article: R. Stone, 'The overseas trade of Bristol before the Civil War', *The International Journal of Maritime History*, Vol. 23 No. 2, (December 2011), pp. 211-229.

driven' will be tested, considering both the growth of Bristol's consumer imports, and how the city responded to the loss of its broadcloth exports to London merchants. Bristol's trade will then be examined on a market by market basis. This will include both investigating the continued fortunes of the traditional trades to France, Ireland, and the Iberian Peninsula during these years, as well as considering the extent to which Bristol merchants became involved in new trading ventures.

The National Context

Much of England's commercial history in the late sixteenth and early seventeenth centuries has been covered in the previous chapter, but it is worth recapping here the ideas which relate specifically to markets and merchandise. The most important story is the decline of the broadcloth trade in the years after 1614. Broadcloth had made up as much as four fifths of English exports, so this crisis resulted in significant disruption in London's traditional Netherlands markets, and a great deal of economic unrest in regions which relied on broadcloth production.[2] The years before the Civil War saw a gradual recovery from this crisis, with Fisher's figures suggesting that by 1640 increased exports of the lighter weight New Draperies had largely replaced the lost broadcloth exports.[3] London's exports, however, remained principally focused on cloth, with only comparatively small quantities of agricultural produce, minerals, and other manufactures being exported.[4] On the import side England's trade was faring rather better, with imports growing significantly at precisely the time of greatest crisis in the cloth export trade.[5] New long-distance trades were opened up in the Mediterranean, East Asia and across the Atlantic, bringing home all manner of exotic luxuries at increasingly affordable

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[2] G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence: Studies in Some Modern Origins of the English-Speaking World* (London, 1957), 25-33; B. E. Supple, *Commercial Crisis and Change, 1600-1642: A Study in the Instability of a Mercantile Economy* (Cambridge, 1949), pp. 23-131; and F.J. Fisher, 'London's Export Trade in the Early Seventeenth Century', *Economic History Review*, 2nd ser., III, No. 2 (1950), pp. 151-161.
[3] Fisher, 'London's Export Trade', p. 153.
[4] Fisher, 'London's Export Trade', p. 161.
[5] R. Brenner, *Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Traders, 1550-1653*, (London, 2003), pp. 39, 41; A.M. Millard, 'The Import Trade of London, 1600-1640', *Unpublished PhD Thesis* (London School of Economics and Political Science, 1956), p. 316.

prices.[6] Coupled with rising disposable incomes as a result of falling food prices, the early seventeenth century saw the beginnings of a consumer culture emerging in England, which lent a good deal of strength to the import trade.[7]

Previous Approaches to Bristol's Trade

The most detailed previous examination of the commodities and markets making up Bristol's trade is D.H. Sacks' analysis of the 1575/6 and 1624/5 Port Books. Based on this, he has suggested that there were significant changes in the nature of Bristol's trade in the late sixteenth and early seventeenth centuries. By the middle of Elizabeth's reign Sacks believed that Bristol's trade had become more import-driven, with high-priced wares from the Iberian Peninsula increasingly forming the backbone of its trade.[8] These included raw materials such as olive oil and dyestuffs, as well as luxuries such as dried fruits, spices, sugar, and fine wines. Sacks concluded that Bristol's trade was driven by this quest for high value wares to the extent that its southern trades overwhelmed those with northern markets, and a gap opened up between imports and the cobbled together export cargoes to the extent that coin must have been illicitly exported to make up the difference.[9] As the period progressed Sacks suggested that, in addition to this increasingly southern focus, 'there were significant changes within [Bristol's] structure of commerce' as 'new markets were opened up with the addition of trades to the Netherlands, the Baltic, and the Western Atlantic'.[10] He also concluded that there were shifts within Bristol's southern markets, with the old haunts on the Atlantic coasts of France and the Iberian Peninsula becoming less important as Bristol merchants traded increasingly into the Mediterranean, visiting ports in eastern Spain, southern France, and

[6] Ralph Davis, *The Rise of the Atlantic Economies* (London, 1973), pp. 207-209
[7] Brenner, *Merchants and Revolution*, pp. 39-45.
[8] Sacks, *Widening Gate*, pp. 36-8.
[9] D.H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700* (Berkeley, 1991), pp. 39-41.
[10] Sacks, *Widening Gate*, p. 40

north-west Italy as they sought to cut out the middlemen in their quest for high value wares.[11]

As with his concerns that the growth of trade was a statistical illusion, however, Sacks' conclusions about the nature of Bristol's trade may have been affected by a misunderstanding of the nature of the valuations contained in the Book of Rates. As has been discussed in the previous chapter (see p. 58) he assigned nominal values to cloth and wine based on their wholesale value, although the customs valuations on other goods were in fact only a third to a half of their wholesale price.[12] Although this misunderstanding will have had little impact in terms of the cloth trade, as Bristol's trade in broadcloth had largely dwindled by the early seventeenth century, it means that Sacks' figures greatly overemphasise the importance of the wine trade. This certainly does not mean that the wine trade did not remain important to Bristol's commerce, and indeed increase significantly in volume during this time. Regardless of any attempts to assign a monetary value, the figures Sacks extracted from the Port Books clearly show that Bristol's recorded wine imports increased markedly from 600 tons in 1575/6 to 1,800 tons in 1624/5.[13] Relative to other goods, however, the real value of the wine trade would not have been nearly as great as Sacks' assumptions imply. In addition these artificially high valuations may have led Sacks to exaggerate the gulf in value between Bristol's import and export trades.[14] Sacks figures may, therefore, have made Bristol's trades appear more 'import driven' than they actually were.

While previous historians have tended to differ in their views regarding the health of Bristol's trade in the late sixteenth and early seventeenth

[11] Sacks, *Widening Gate*, pp. 41-44.
[12] Sacks, *Widening Gate*, pp. 38, 41.
[13] Sacks, *Widening Gate*, pp. 39, 43.
[14] Taking 1624/5 as an example, Sacks' figures would suggest that Bristol's imports were worth £61,000 while exports were worth just £23,000, a difference of 265 per cent. The nominal values employed by this study, however would suggest that imports amounted to £50,500 and exports £22,500, a difference of 224 per cent. Based on analysis of Sacks, *Widening Gate*, pp. 38, 42-3. Sacks valued wine at £15 the ton and broadcloth at £8 the cloth, whereas here they are valued at £9 the ton and £4.50 the cloth respectively.

century, there has actually been a reasonable degree of agreement about the main trends in terms of commodities and markets. Their relatively scant consideration of the statistical evidence, however, means that discussion of these factors has often been limited. In terms of exports, Jean Vanes' figures charted the decline of Bristol's traditional broadcloth trade in the second half of the sixteenth century, suggesting that 'Bristol could hardly claim to be a major cloth exporting town by the end of the century'.[15] G.D. Ramsay also shared Sacks' negative interpretation of Bristol's export trade suggesting that exports 'during the summer of 1622 consisted entirely, apart from a little baize probably of local manufacture, of lead and lead ore'.[16] Indeed Ramsay felt that it was only the foreign demand for lead which prevented Bristol from becoming totally moribund as a commercial centre in the early seventeenth century.

Previous historians have also tended to share Sacks' view that Bristol's trade was expanding into new markets in the late sixteenth and early seventeenth centuries. Seeking continuity with trends later in the century, Ramsay stressed the importance of emerging trade with the American colonies, both in Newfoundland and further south, in maintaining Bristol's commercial fortunes through these years.[17] Even in the late sixteenth century, Vanes felt that Bristol's trade was already beginning to look to new markets. In the last decade of the century her study suggested that 'voyages to Italy and the Levant, the Atlantic Islands and very occasionally to Guinea, as well as the appearance in the port of some Dutch and Scandinavian ships... show the widening horizons of Bristol's trade'.[18] McGrath too felt that Bristol was beginning to participate in a number of new trades 'which were not individually of great importance but which collectively made a very valuable addition to the total'. These included trades with 'the Azores, Madeira and Barbary; with Leghorn and

[15] J. Vanes, *The Port of Bristol in the Sixteenth Century*, Bristol Historical Association pamphlets no. 39 (Bristol, 1977), pp. 22-3.
[16] Ramsay, *English Overseas Trade*, pp. 140-1. The Port Book cited by Ramsay (1135/2) appears to be a return of the Collector of New Impositions for Bristol from Easter to Michaelmas1622, and is only 6 folios in length.
[17] Ramsay, *English Overseas Trade*, pp. 41-3.
[18] Vanes, *Port of Bristol*, pp. 25-6.

Venice; with Amsterdam, Flushing, Hamburg and Bergen' although contrary to Ramsay he felt that, the West Indian and North American trades 'had made a modest appearance, but were not yet of much importance'.[19] On the whole, however, McGrath felt that 'in the years up to the Civil War, Bristol's overseas trade was based primarily on Ireland, France, and the Iberian peninsula'.[20]

Previous interpretations of the markets and merchandise which made up Bristol's trade do not, however, necessarily fit with the trends observed in the previous chapter. Although the rapid expansion of Bristol's imports fits well with Sacks' perceived quest for high value wares, the equally rapid expansion of exports does not tally with what have tended to be gloomy views of Bristol's export trade in the late sixteenth and early seventeenth century. A more detailed exploration of the customs statistics to firmly establish the commodity and market make-up of Bristol's trade in these years is, therefore, certainly justified.

The Commodities of Bristol's Trade

As Sacks suggested, the Port Books show Bristol importing a proliferation of high value southern wares in the late sixteenth and early seventeenth centuries, benefiting from a national boom in demand for both imported luxuries and raw materials. They also, however, show that Sacks oversimplified the situation by suggesting that Bristol's trade was entirely driven by this quest for high value imports. The Bristol Port Books reveal a diverse range of exports, which would have helped the city to ride out the crisis which hit London when the demand for broadcloth collapsed. Both agriculture and industry underwent significant developments in this period, and the potential to find overseas outlets for this increased output perhaps did as much to further the development of Bristol's trade as the demand for exotic imports.

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[19] P. McGrath, *Merchants and Merchandise in Seventeenth-Century Bristol*, Bristol Record Society vol. XIX, (1955), p. xxi.
[20] McGrath, *Merchants and Merchandise*, p. xx.

Imports

In terms of imports, Bristol's trade seems to fit with the accepted national picture. The relative prosperity of London's import trades has often been noted by historians, as demand rose for luxury goods such as silks, spices, currants and other exotic foodstuffs, as well as raw materials.[21] As Sacks suggested, Bristol's imports followed a similar pattern, with high value southern wares coming to play an increasingly important part (see Figure 15).[22]

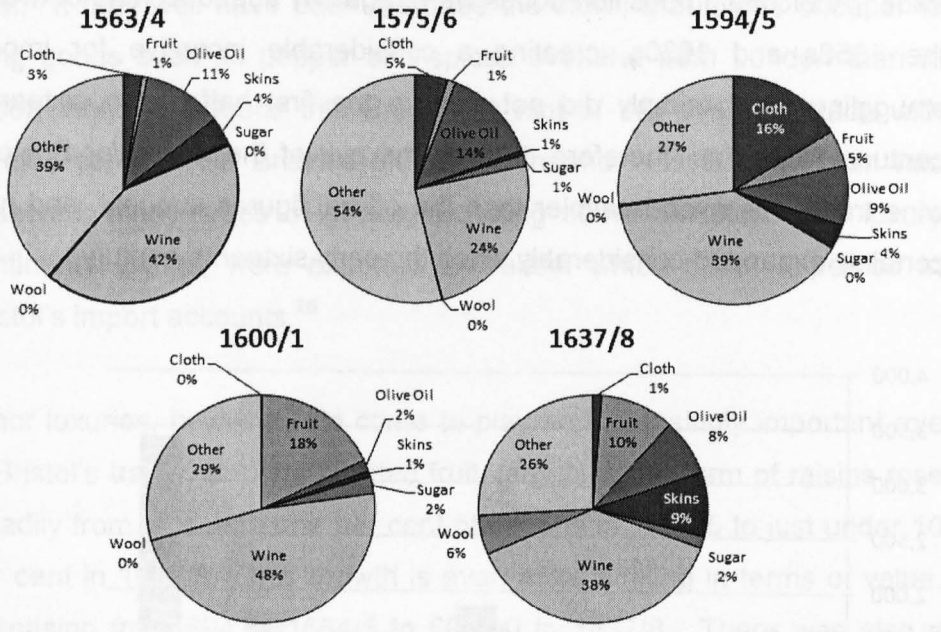

Figure 15 - Bristol's Imports by Commodity as Recorded in the Port Books, 1563/4-1637/8 (in pounds sterling):[23]

Foremost among Bristol's imports was wine. Having suffered a serious setback early in Elizabeth's reign, Bristol's recorded wine imports recovered over the course of the seventeenth century to once more make up about 40 per cent of the import trade (see Figure 15 and Figure 16). Although the high total from 1637/8 may represent an exceptional year (possibly as a result of the heavy presence of royal commissioners in

[21] Brenner, *Merchants and Revolution*), pp. 39-45; Millard, 'The Import Trade of London'
[22] Sacks, *Widening Gate,* p. 40.
[23] Based on analysis of: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1136/8. See Appendix 2.1. Due to the poor condition of many of the Port Books and the tendency of the customs officers to group together the duty paid by several different commodities, it has not proved possible to collate commodity data for all surviving years.

Bristol leading to a reduction in smuggling), it is clear that by the eve of the Civil War imports of wine were healthy. Indeed the 1,600 tons imported in 1612/13 and 1,800 tons imported in 1624/5 were similar to the decade averages from the Enrolled Accounts of the first half of the sixteenth century (which were between 1,300 and 1,700 tons), and the 3,400 brought in in 1637/8 was almost double them.[24] In addition, Bristol's wine imports in the late sixteenth and early seventeenth centuries are likely to have been supplemented by a significant illicit trade. Additional Imposition duties were regularly added to wine between the 1550s and 1630s, creating a considerable incentive for import smuggling which simply did not exist in the first half of the sixteenth century. It seems, therefore, that by the eve of the Civil War Bristol's wine trade was even healthier than the official figures suggest, and had certainly expanded considerably since the early sixteenth century.

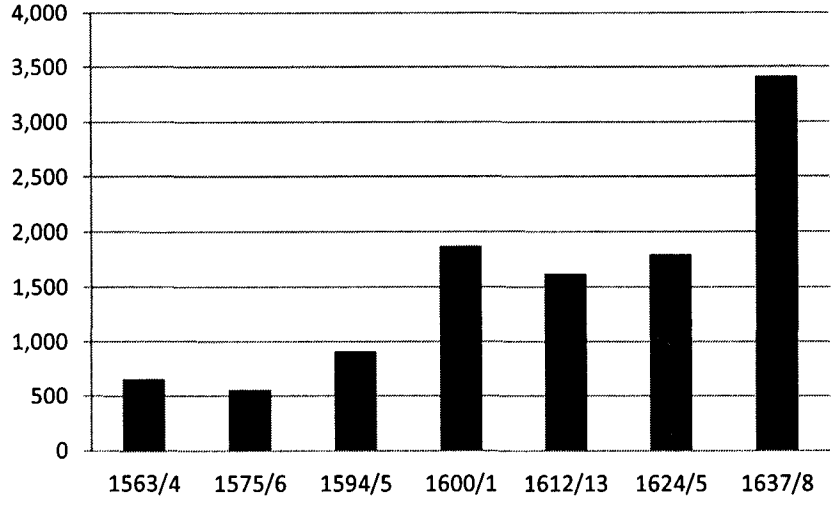

Figure 16 - Bristol's Declared Wine Imports, 1563/4-1637/8 (tuns):[25]

There is relatively scant evidence of the exotic silks and spices, which were the key to many London merchant's increased involvement in the southern trades, being imported into Bristol. Pepper, for example, was

[24] J. Vanes, *The Port of Bristol in the Sixteenth Century*, Bristol Historical Association pamphlets no. 39 (Bristol, 1977), p. 22.
[25] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate,* pp. 42-3; TNA PRO E190/1134/3; E190/1136/10. See Appendix 2.1.2. See Appendix 2.2 for notes on how the figures were converted into tons.

imported in fairly significant quantities in the mid-sixteenth century, making up as much as 20 per cent of Bristol's imports in 1575/6, but declined into insignificance in the early seventeenth century. Rather than lack of demand, however, this could be as a result of differences in the markets to which the two ports traded. Bristol, trading with Iberian ports would only receive such goods after they had passed through many hands, thus at an increased price, whereas London merchants could buy them straight from their source in the deep Mediterranean or the Far East. It may well have been the case therefore, that it was cheaper to bring goods such as pepper and spices overland from London than to import them from Iberia into Bristol. A hint of this overland trade with London comes from Bristol's exports to Ireland. As Susan Flavin has observed, many types of goods, including some foodstuffs and luxury continental cloths, were exported to Ireland which never appeared in Bristol's import accounts.[26]

Minor luxuries, however, did come to play an increasingly important role in Bristol's trade. Imports of dried fruit, largely in the form of raisins rose steadily from less than one per cent of imports in 1564/5 to just under 10 per cent in 1637/8. This growth is even more striking in terms of value, increasing from £94 in 1564/5 to £8,200 in 1637/8. There was also a brief flirtation with the import of currants, £4,200 worth making up 12 per cent of Bristol's imports in 1600/1. Although these then disappear from the official statistics, it seems likely that Bristol illicitly continued its import trade in Levantine currants well into the seventeenth century (see pp. 100-101). Imports of sugar, which was fast becoming a more accessible luxury due to falls in its price, also showed a notable increase over this period. It had barely featured as a commodity in the mid-sixteenth century, however as much as £9,000 worth was imported in 1594/5. This exceptionally high figure may perhaps relate more to the take of privateers than normal trade, although imports of £4,000 worth in 1620/1 and £1,300 in 1637/8 confirm that a significant demand had developed.

[26] Susan Flavin, 'Consumption and Material Culture in Sixteenth-Century Ireland', *Economic History Review*, Vol. 64 No. 4 (November 2011), p. 1164.

More mundane items are also notable among Bristol's imports; for example imports of salt remained between £500 and £1,500 in every year data survives from, making up around 2 per cent of imports. Grain was also imported in significant quantities in years of poor harvests, for example £4,200 worth in 1637/8 (5 per cent of imports). This is a trend which has also been observed in London's trade, although Bristol appears to have turned to France rather than the Baltic to secure additional supplies of grain.[27]

Raw materials were also imported into Bristol in greater quantities, the most important of which was olive oil, a commodity used in the manufacture of soap which was essential for the cloth industry. Imports of oil already made up 11 per cent of Bristol's inward trade in 1563/4, with nearly £1,400 being brought in. This trade increased over the course of the late sixteenth and early seventeenth century, climbing to £5,300 in 1600/1; £8,000 in 1620/1; and £6,500 in 1637/8. The dyestuff woad was also brought in in significant quantities; although its percentage share of Bristol's imports declined from as much as 11 per cent in 1575/6 to just over 1 per cent in 1637/8. In terms of value, however, this still remained a substantial trade; more than £1,000 worth was imported in 1637/8, and this had been as high as £1,500 in 1620/1. Towards the end of the period wood and wool also began to be shipped to Bristol in significant quantities. Wood, perhaps for use in the shipbuilding or construction industries, totalled more than £1,000 in both 1620/1 and 1637/8, and £5,500 of wool, mostly from Ireland, was imported in 1637/8.

Such a demand for imported goods in Bristol's hinterland certainly suggests a degree of prosperity. The demand for raw materials indicates healthy industries, and the demand for luxury goods implies that many people had income to spare. This is far from the bleak picture of the English economy 'on the verge of ruin' described by Supple in his study

[27] R. Davis, *English Overseas Trade, 1500-1700*, (London, 1973), p. 29

based on London and the cloth industry.[28] Even in the midst of the great depression in 1620/1 Bristol imported £4,000 worth of sugar and £2,700 worth of fruit. These findings would certainly seem to support Brenner's conclusion that 'the cloth export crisis hit extremely hard, but its effects were apparently geographically limited' with a growing market in other regions 'absorbing record imports of commodities of all types'.[29]

Exports

Bristol's exports provide an equally strong suggestion that the region's economy was relatively healthy in the late sixteenth and early seventeenth centuries. The expansion of Bristol's exports has already been discussed (see pp. 43-51), seeing them rise from little over £7,000 a year in the late sixteenth century to almost £50,000 in 1636/7. This is a marked contrast to London's recorded trade, which after a prosperous start to the seventeenth century saw its exports go through difficult times in the years leading up to the Civil War. The principal reason for Bristol's export success in these years seems to have been the diverse range of commodities in which it traded. As late as 1640 cloth made up almost 75 per cent of London's exports, whereas Bristol was exporting a diverse range of other manufactures, agricultural produce, and raw materials (see Figure 17). While to an extent this diversity had perhaps initially been borne out of desperation, as Bristol's merchants were forced out of the cloth trade by their London rivals in the sixteenth century, in the long run it proved a great advantage, allowing Bristol to weather the collapse in overseas demand for broadcloth which led to crisis among London's overseas traders in the years after 1614.

[28] Supple, *Commercial Crisis and Change*, p. 56, ch. 2-6.
[29] Brenner, *Merchants and Revolution*, p.42.

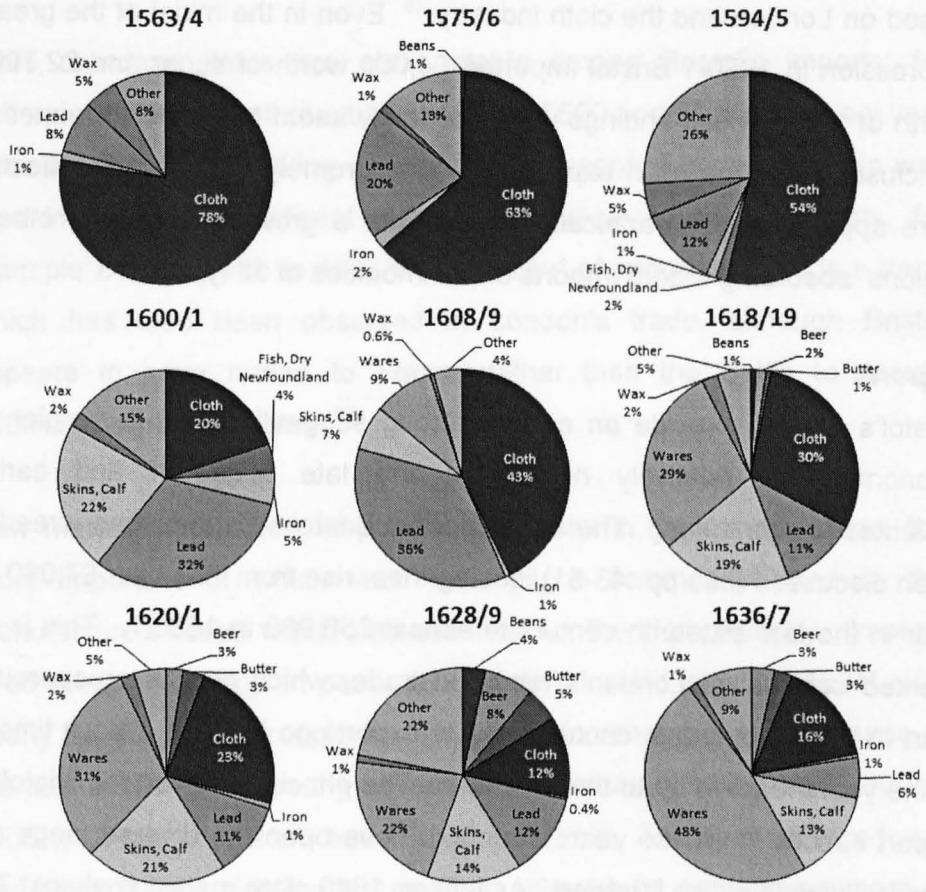

Figure 17 - Bristol's Exports as Recorded in the Port Books, 1563/4-1636/7 (in pounds sterling):[30]

Bristol had previously been a great cloth exporting centre, responsible for at least half of England's cloth exports in the fourteenth century. As late as 1563/4 cloth had made up as much as 78 per cent of Bristol's exports, although this was atypically high for the mid-sixteenth century.[31] Compared to annual exports of more than 3,000 cloths in the first two decades of the sixteenth century, Bristol's broadcloth trade was showing a considerable decline during Elizabeth's reign.[32] Little over 1,000 cloths were exported in 1563/4, by 1594/5 this had declined to 500, and in 1600/1 just over 250 cloths had left Bristol (see Figure 18). That these

[30] Based on analysis of: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1133/8; E190/1134/10; E190/1136/1; E190/1136/3; and E190/1136/10. See Appendix 2.3. Due to the poor condition of many of the Port Books, it has not proved possible to collate commodity data for all surviving years.
[31] Ramsay, *English Overseas Trade*, p. 135.
[32] Vanes, *The Port of Bristol*, p. 22.

low figures are reflective of a wider trend is confirmed by the Enrolled Accounts, which show Bristol to have exported an average of just 400 cloths per year between 1593 and 1600.[33] Although the 1620/1 Port Book shows a slightly higher figure with 850 cloths exported, the 1624/5 and 1636/7 books confirm that this was a long-term decline with broadcloth exports of 250 and 320 cloths respectively.

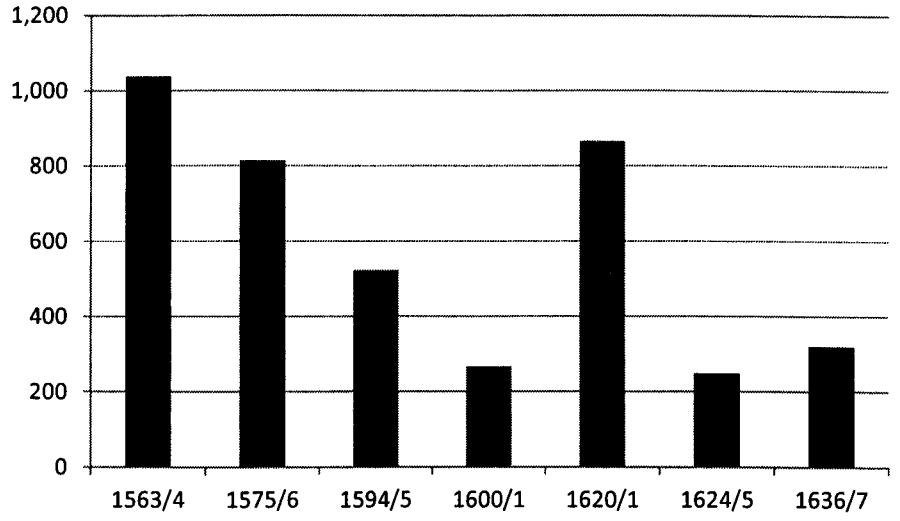

Figure 18 - Bristol's Broadcloth Exports, 1563/4-1636/7 (in Cloths of Assize):[34]

Viewing Bristol's cloth exports as a whole, however, the picture is not quite so grim. Although the cloth trade never recovered its early sixteenth-century levels, Bristol had to an extent replaced its lost broadcloth exports by developing a trade in the 'New Draperies'. These new varieties of cloth were much lighter in weight than the traditional heavy English broadcloth, and found considerable demand in Bristol's markets in southern Europe. In 1620/1 Bristol exported £3,900 worth of poundage paying cloth, and in 1636/7 as much as £5,900 worth, 80 per cent of Bristol's cloth exports (see Figure 19). Indeed there is even some evidence that the Bristol Corporation deliberately tried to establish a New Drapery manufacturing industry in the city. In 1610 they invited a group

[33] Vanes, *The Port of Bristol*, p. 22.
[34] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1134/10 and E190/1136/10; Sacks, *Widening Gate*, p. 43. See Appendix 2.3.2.

of people to come from Colchester to the city to 'set up the trade of "bayes and says"', paying for the expense of bringing them to the city, granting them freemen status, and making them loans of £50 each.[35] Even though it was never to regain its fifteenth and early sixteenth century levels of prosperity, largely thanks to the new varieties of cloth Bristol's cloth, trade had experienced a considerable recovery by the 1620s with the total value of cloth exports considerably outstripping that recorded at the beginning of Elizabeth's reign.

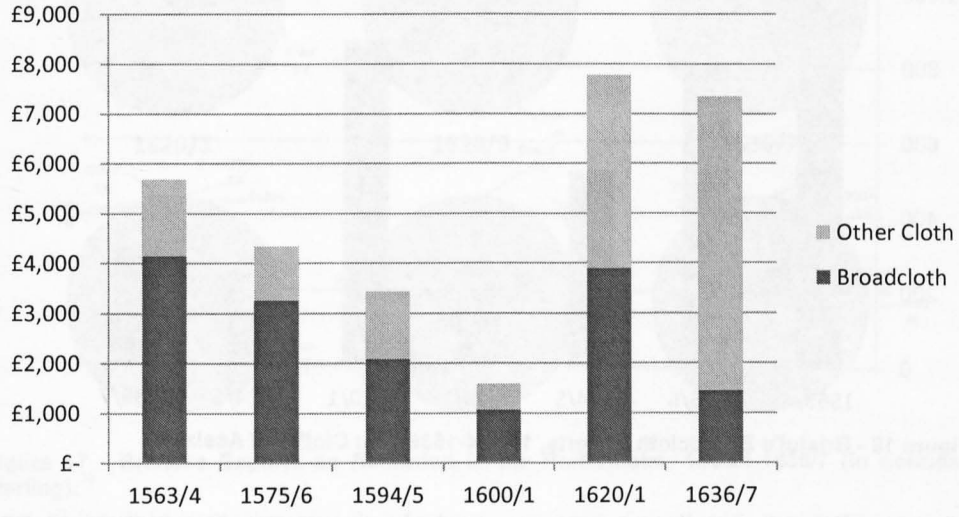

Figure 19 - Bristol's Cloth Exports as Recorded in the Port Books 1563/4-1636/7 (in pounds sterling):[36]

In addition to these cloth exports, Bristol had also begun to export considerable quantities of agricultural goods. Analysing the growth of this trade is a little difficult, as a considerable illicit trade had existed in commodities such as leather and grain since the mid-sixteenth century.[37] Although no leather was recorded in the late sixteenth-century accounts, the early seventeenth century saw considerable quantities of exported calf skins recorded in the Bristol Port Books; in each of the years 1618/9,

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[35] J. Latimer, *The Annals of Bristol in the Seventeenth Century*, (Bristol, 1900), pp. 40-1.

[36] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1134/10 and E190/1136/10. See Appendix 2.3. As elsewhere in this chapter, cloths paying specific duties (broadcloth) have been valued at £4 per notional cloth prior to 1604 and £4.50 thereafter.

[37] E.T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol*, (Farnham, 2012), ch. 5.

1620/1, and 1636/7 these amounted to more than £6,500 (see Figure 20). It is certainly possible that a portion of this apparently new trade merely represents a previously illicit trade shifting to being more openly conducted, in response to a more generous licencing regime allowing merchants to circumvent the prohibition on leather exports. Latimer, for example, records the issuing of a royal licence in 1614 to John Whitson and four other Bristol merchants for the export of 1,000 dickers of tanned calf skins per annum. The Port Books also often noted the licence under which the skins were being exported, most frequently that issued to 'Francis Knight and others'.[38] On the other hand, it seems highly unlikely that it would have been possible to entirely conceal a trade of this scale in the years prior to 1600, so it must at least to an extent represent a genuine growth. After all, the skins exported in 1620/1 (£6,500) were worth the equivalent of almost 92 per cent of Bristol's total recorded exports in 1594/5 (£7,100). It must also be borne in mind that the availability of licences did not necessarily preclude the continuation of an illicit trade in calf skins. In the 1540s licences were certainly available, but as a result of their high cost merchants such as John Smyth and the Tyndall brothers still exported 3-4 calf skins for each one covered by a licence.[39] Indeed, in 1640 the licence for calf skin exports was withdrawn due to allegations that considerable quantities of the best hides were being exported under colour of the licence.[40] It seems highly likely, therefore, that the increase in calf skin exports recorded in the early seventeenth century Bristol Port Books does represent a genuine increase in trade, and indeed the number exported may have considerably exceeded this.

[38] Latimer, *Annals,* p. 54; TNA PRO E190/1133/1; E190/1134/11; E190/1136/1; E190/1136/3.
[39] Jones, *Inside the Illicit Economy,* pp. 97-103, 114.
[40] Latimer, *Annals*, p. 150.

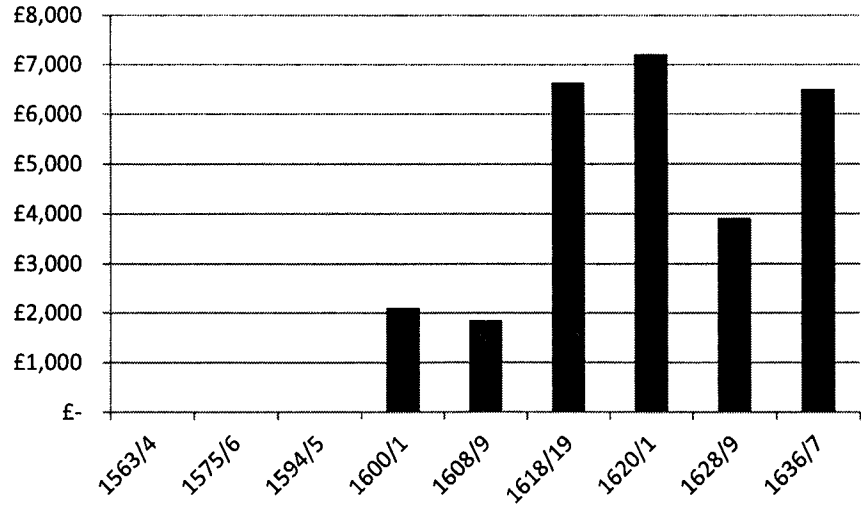

Figure 20 - Bristol's Recorded Calf Skin Exports, 1563/4-1636/7:[41]

In addition to calf skins, Bristol also exported a range of other agricultural produce. Foodstuffs were particularly prominent amongst these, making up as much as 16 per cent of Bristol's recorded exports in 1628/9, although again these are likely to have been supplemented by illicit exports. Exports of beer are also notable, topping £2,000 in 1628/9 and £1,700 in 1636/7. Increasing quantities of salted Welsh butter were also recorded, with £250 in 1618/19 rising to £1,100 in 1620/1, £1,400 in 1628/9, and £1,300 in 1636/7. Like calf skins, these certainly benefitted from the issuing of new royal licences, although there is also evidence that butter was being smuggled on a considerable scale in excess of these. Work by Alex Higgins on the Society of Merchant Venturers of Bristol's *Book of Trade* has shown that the society went to considerable effort and expense in the early seventeenth century to gain a two thirds share in a licence for the export of 6,000 kilderkins of Welsh butter a year.[42] Seizures for illicit exports of butter had become increasingly common in the latter sixteenth century, and it seems that in the early seventeenth century (as with leather) Bristol merchants continued to

[41] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; TNA PRO E190/1133/9; E190/1136/3; E190/1134/11; E190/1136/1; E190/1136/8. See Appendix 2.3.3.

[42] A. Higgins, 'The Society of Merchant Venturers' attempts to obtain a share in the licence to export Welsh butter in the early seventeenth century', (unpublished undergraduate Special Field Project, University of Bristol, 2009), p. 5. See: BRO SMV/2/1/1/34, pp. 65, 67-8, 82-4, 93-7, 117-8.

export butter in excess of that covered by their licence. Several Bristol merchants were summoned to the Star Chamber on allegations of butter smuggling in both 1619 and 1639, and a commission established in Bristol in 1636/7 to investigate smuggling estimated that 1,500 kilderkins a year had been smuggled out of the city in the previous decade.[43] Overall, therefore, although the figures from the Port Books cannot necessarily be relied upon to show the full extent of this trade, in the early seventeenth century Bristol was certainly beginning to export increasingly large quantities of a wide range of agricultural produce.

The aspect of Bristol's exports which saw the greatest growth, however, was industrial goods. Lead from the Mendip mines had always played a part in Bristol's trade, making up 80 per cent of exports in 1563/4 and 20 per cent in 1575/6. Advances in mining techniques saw these exports increase considerably over the course of the late sixteenth and early seventeenth centuries (see Figure 21). From 800 cwt in 1563/4 they rose to a peak of 13,300 cwt in 1608/9. Although they declined thereafter (possibly affected by the introduction of new Imposition duties from 1610) lead exports still remained high at around 4-5,000 cwt in the 1620s and 30s.

[43] Higgins, 'Society of Merchant Venturers' attempts', pp. 13-15; A. Higgins, 'The 1636-7 Royal Commission investigating alleged smuggling offences committed by the Merchants of Bristol', *unpublished BA dissertation, University of Bristol* (2011), p. 18. See: P. McGrath (ed.), *Records Relating to the Society of Merchant Venturers of the City of Bristol in the Seventeenth Century*, Bristol Record Society vol. XVII (Bristol, 1952), pp. 123-5; and Oxford, Bodleian Library, MS. Bankes, 55/85 - *Schedule of Charges against four named Bristol merchants.*

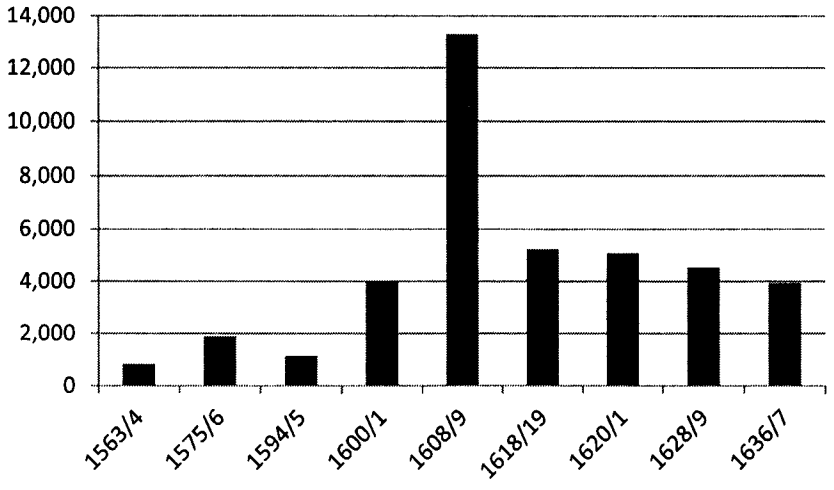

Figure 21 - Bristol's Lead Exports, 1563/4-1636/7 (cwt):[44]

An even greater expansion was seen in exports of the miscellaneous category 'wares' (see Figure 22). Wares had only rarely been recorded in the late sixteenth century Port Books, but the early seventeenth century saw a significant expansion with wares making up 48 per cent of all recorded exports by 1636/7. Unfortunately it will never be possible to say in any detail what mix of commodities made up these 'wares'; it was simply an abbreviation used by the customs officers to enter mixed consignments when it would have been too much trouble to enter each item individually. It is generally agreed, however, that they mostly consisted of small manufactured goods such as pins, knives, glass, tools, wooden tableware, and any number of other everyday items.[45] A hint of this trade comes from the background smattering of assorted goods recorded in the Port Books which escaped this grouping. For example, 1636/7 saw £243 worth of nails, £125 of cards, £112 of hose and £77 of stockings, £63 of shot, and £41 of soap along with a variety of other smaller consignments such as £18 of knives, £12 of wooden combs, £3 of buttons, and £3 of frying pans.[46] The vast majority of these 'wares' (£17,400 worth in 1636/7) were bound for Ireland, supporting the

[44] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; TNA PRO E190/1133/9; E190/1136/3; E190/1134/11; E190/1136/1; E190/1136/8. See Appendix 2.3.4.
[45] D.M. Woodward, *The Trade of Elizabethan Chester*, (Hull, 1970), pp. 12-22; D.M. Woodward, 'The Overseas Trade of Chester, 1600-1650', *Transactions of the Historic Society of Lancashire and Cheshire*, CXXII (1970), p. 33.
[46] TNA PRO E190/1136/8.

characterisation of them as small manufactured goods. To a lesser extent they did also feature in the continental trade with 1636/7 seeing £2,300 worth of 'wares' sent to the Canaries, £750 to Portugal (including £150 of 'goods'), and £500 to Spain. Again it seems reasonable to characterise these as small domestic manufactures, as Bristol's continental imports also included a smattering of nails, wire, knives, hose, and stockings. This rise in the export of these 'wares' certainly suggests that England manufactured many goods other than cloth, and that in the early seventeenth century they were increasingly beginning to find a market overseas.

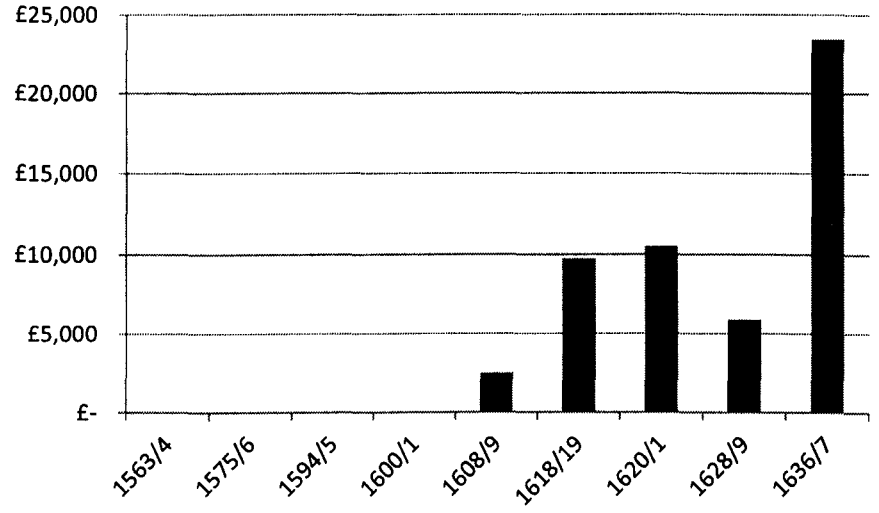

Figure 22 - Bristol's Exports of 'Wares' as Recorded in the Port Books, 1563/4-1636/7:[47]

Bristol's export figures also throw some light on a theory about the development of industry in England in the late sixteenth and early seventeenth century which was suggested by John Nef. He proposed that England experienced an 'Industrial Revolution' in the years between 1540 and 1640, with the increased availability of coal as a fuel, the adoption of new technology and industrial scale production leading to a

[47] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; TNA PRO E190/1133/9; E190/1136/3; E190/1134/11; E190/1136/1; E190/1136/8. See Appendix 2.3.

significant expansion in a wide variety of industries.[48] Although it has attracted a great deal of interest, more recent historians have tended to be critical of Nef's idea, even to the point of discrediting it.[49] Even though attempts were made to establish large-scale industries, and the government attempted to encourage these, other than in a few specific cases these are seen as having been largely unsuccessful, with much of England's manufacturing remaining domestic in scale.[50]

Further counter evidence provided by Coleman is that: 'woollen cloth aside, English exports were still those of a primary producer, with virtually no other manufactured wares in the export list'.[51] However, this conclusion may have been effected by the tendency of trade statistics of this period to focus purely on the trade of London, assuming that this trend would be mirrored in the outports. On the eve of the Civil War London's exports were still dominated by cloth, with minerals and other English manufactures making up just 6 per cent of its total exports (see Figure 23). This, however, was a marked contrast to the situation at Bristol where cloth had diminished in importance to be replaced by rapidly increasing quantities of both minerals such as lead and manufactured 'wares'. The most likely explanation for this is that the bulk and weight of ore and metal goods made it cheaper to export them from the outports rather than going to the expense of transporting them by land to London. It would certainly be too big a leap to make wide reaching conclusions based solely on figures from Bristol, but if the export trade of other outports was equally diverse it may be that by focusing exclusively on London previous historians have been unduly negative about the level of England's industrial output in the early Stuart years. Duncan Taylor's work on the overseas and coastal trade of the smaller Bristol Channel ports also seems to support these conclusions. For the latter sixteenth

[48] J.U. Nef, 'The Progress of Technology and the Growth of Large-Scale Industry in Great Britain, 1540-1640', *Economic History Review* (1934), pp. 3-24; J.U. Nef, *The Rise of the British Coal Industry*, vol. I (London, 1932), pp. 165-189.
[49] J.E. Inikori, *Africans and the Industrial Revolution in Britain: A Study in International Trade and Economic Development*, (Cambridge, 2002), p. 39.
[50] A.E. Musson, *The Growth of British Industry*, (London, 1978), p. 43; S.M. Jack, *Trade and Industry in Tudor and Stuart England*, (London, 1977), p. 115.
[51] D.C. Coleman, *The Economy of England 1450-1750,* (Oxford, 1977), p. 69

century he commented that 'the Bridgwater Port Books illustrate the development of felt and pottery ware as late century industries' and ports around 'Cardiff began to develop the primary and heavy industries which would come to dominate their futures'.[52]

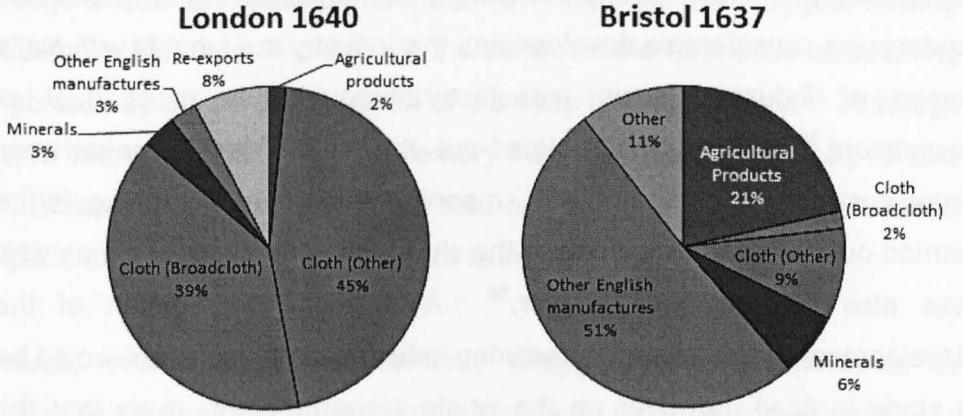

Figure 23 - Comparison of Exports at London and Bristol as Recorded in Port Books c. 1640 (in pounds sterling):[53]

In the case of Bristol's manufactured exports, it is certainly possible that some may have been sourced further afield or indeed overseas. Imports of these into Bristol are not, however, recorded to any great extent in these years so any re-exports must have been brought overland from London, and the sheer amount of 'wares' exported suggest that a significant proportion of these must have been produced locally. Unfortunately there have been relatively few investigations of industry in Bristol and its region in the Early Modern period, although there are a few examples which suggest that manufacturing was beginning to develop, albeit on a domestic rather than an industrial scale. Thirsk, for example, quotes the case of a scheme which was set up in Bristol in 1623 to teach poor children pin making.[54] The most detailed study of a Bristol industry in recent years is Chris Heal's investigation of the development of felt hat manufacture.[55] The Bristol Company of Feltmakers and Haberdashers

[52] D. Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports in the Sixteenth Century', *Unpublished PhD Thesis* (University of Bristol, 2009), p. 240.
[53] F.J. Fisher, 'The Sixteenth and Seventeenth Centuries: The Dark Ages in English Economic History?' *Economica*, New ser., XXIV (1957), p. 154; TNA/PRO, E190/1136/8. See Appendix 2.3.
[54] J. Thirsk, *Economic Policy and Projects – The Development of a Consumer Society in Early Modern England*, (Oxford, 1978), p. 82
[55] C. Heal, 'The Felt Hat Industry of Bristol and South Gloucestershire, 1530-1909', *Unpublished PhD Thesis* (University of Bristol, 2012).

was first founded in 1595, and within five years of its inception had sixty members.[56] The trade, however, appears to have first been established in Bristol as early as 1540, and Heal's analysis of Bristol's exports has shown that it was finding a market for hats in Ireland as well as domestically.[57] While clearly indicating that manufacturing in Bristol was undergoing considerable development, this industry does not fit with Nef's image of industrial scale manufacture requiring a great deal of investment.[58] As Heal has pointed out, the tools of the feltmaker were 'inexpensive and commonplace', meaning that manufacture could be carried out on a domestic scale in the shop, or in one case by a man who was also a brewhouse keeper.[59] A detailed investigation of the development of Bristol's manufacturing industries in these years would be a study in itself, however on the whole it seems highly likely that the substantial growth in exports of 'wares' does reflect a growth of manufacturing in the region.

While some manufactured goods may have been brought in from further afield, the high bulk and weight of Bristol's mineral exports means that it would have been uneconomical to bring these in from any great distance. The mining industry was one which was particularly singled out by Nef as an area of growth in the late sixteenth and early seventeenth centuries, and Bristol's greatly increased exports of lead (almost certainly from mines in the Mendip Hills) as well as some coal and iron would certainly support this conclusion.[60] There is also evidence of Bristol's merchants investing in the iron industry; Walter Sandy was one of the founders of the Ynyspennllwch ironworks in the Swansea valley, and John Gonning and John Taylor had an interest in ironworks in the Forest of Dean.[61] Duncan Taylor's investigations of the smaller Bristol Channel ports also show the movement of considerable quantities of iron, lead and coal. In the case of coal in particular, he has suggested that rife under-recording

[56] Heal, 'The Felt Hat Industry', p. 57.
[57] Heal, 'The Felt Hat Industry', pp. 59-60, 71.
[58] Nef, 'The Progress of Technology', p. 6.
[59] Heal, 'The Felt Hat Industry', pp. 84-5.
[60] Nef, 'The Progress of Technology', pp. 9-11.
[61] McGrath, *Merchants and Merchandise,* pp. xxiv, 110-111.

in the Cardiff customs accounts may have led Nef to considerably underestimate the extent of the Welsh coal industry in the late sixteenth century, and hence how early this industry had developed.[62]

Finally, Bristol's increasing imports of raw materials also suggest thriving industry in the city. In particular the considerable quantities of oil being imported pay tribute to the health of the soap boiling industry.[63] Although it was in the second half of the century that this industry was truly to take off, Bristol's first sugar house was also opened as early as 1612 to refine imports of cane sugar from southern Europe.[64]

Overall, even though Nef certainly exaggerated the importance of technological improvements and the growth of large-scale capitalistic industries, historians have generally accepted that England's industries did make considerable progress in the late sixteenth and early seventeenth centuries, with mining and manufacturing in particular seeing increased output.[65] The evidence from Bristol's Port Books would certainly tend to support this conclusion. Although there is only limited evidence for investment in large-scale industry in the region, the increased output of the Mendip mines is clear to see, and the great exports of manufactured 'wares' suggest that manufacturing industry (albeit on a domestic scale) was thriving. As with the great demand for imported luxuries, this evidence would tend to suggest that Supple's early seventeenth-century economic crisis was largely restricted to the cloth producing regions. Industry in Bristol and its hinterland appear to have been faring well in these years, both being supplied by and finding a valuable outlet in overseas trade.

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[62] Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports', p. 163.
[63] H.E. Matthews (ed.), *The Company of Soapmakers 1562-1642,* Bristol Records Society vol. 10 (Bristol, 1939).
[64] I.V. Hall, 'Bristol's Second Sugar House', *Transactions of the Bristol and Gloucestershire Archaeological Society*, vol. 68 (1949), p. 110.
[65] Musson, *The Growth of British Industry*, pp. 52-4; Inikori, *Africans and the Industrial Revolution*, p. 39.

The rapid expansion and diverse range of Bristol's exports also suggest that Bristol's trade at this time was not so solely import driven as Sacks has suggested. Sacks characterised Bristol's trade in this period as being driven by the quest for high valued goods from southern markets, with Bristol's merchants merely cobbling together export cargoes to allow them to bring back their exotic wares.[66] Looking at the deficit between imports and exports, he even went so far as to say that Bristol may have had to resort to the export of bullion, or to bills of exchange to make up the difference in value.[67] On the other hand, Sacks' use of inappropriate nominal values for wine and cloth may have served to exaggerate this deficit, as it means that his figures considerably overvalue the wine import trade in relation to other commodities (see p. 68).

Bristol's rampant illicit export trade may have served to widen the perceived gap between imports and exports. To an extent this was possibly balanced out from 1558 onwards as Bristol merchants also began to smuggle imports of wine on a considerable scale, but there can be little doubt that illicit exports remained an important and profitable part of Bristol's trade. Unfortunately no comparable merchant ledger has survived from early seventeenth-century Bristol, but Jones' work on John Smyth's ledger from the 1540s has shown that illicit exports of grain and leather made up as much as 47 per cent of his export trade.[68] Although the evidence is less concrete, as has already been discussed (see pp. 68-71) it is clear that Bristol continued to export significant quantities of goods illicitly in the early seventeenth century. Such were the possible profits to be made on illicit exports, that Jones has suggested that John Smyth may have even considered this as 'the *most* important branch of his trade'.[69] Smyth was able to get returns of as much as 150 per cent on his exports of grain, and 84 per cent on his exports of leather, and although 64 per cent of the profits recorded in his 'gains' account were from the sale of import cargoes, much of this would in fact have been

[66] Sacks, *Widening Gate*, pp. 36-52
[67] Sacks, *Widening Gate*, p. 39.
[68] Jones, *Inside the Illicit Economy*, p. 107.
[69] Jones, *Inside the Illicit Economy*, p. 107.

made up by the profits on his exports, as it was the sale of these which determined the amount of goods he was able to import.[70] Overall, therefore, profits made on the export side of Bristol's trade may have been much more important than Sacks had supposed.

There was certainly a gap between Bristol's recorded exports and imports in the early seventeenth century, for example, £82,800 worth of goods were imported in 1637/8, but only £48,600 had been exported the previous year. This does not, however, necessarily mean that trade as a whole was unbalanced. This deficit could, for example, merely represent the profits made on the sale of export cargoes, which were naturally brought home in the form of more import goods. Bristol's exports in fact expanded at a significantly faster rate than imports during this period (see Figure 24). Even though there had been a dip in the war years of the 1620s, in 1636/7 Bristol's recorded exports were 511 per cent of their value at the beginning of the century, whereas imports the following year had increased to just 244 per cent of their level in 1600/1. It must be noted that as a result of export smuggling during the Anglo-Spanish War the 1600/1 figure may considerably underestimate the extent of Bristol's exports, and therefore exaggerate the level of growth in the years after the war. Even taking 1608/9 as a base, however, Bristol's exports had grown to 175 per cent of their value by the eve of the Civil War, matching the rate of expansion in imports. Exports, therefore, remained an important, and potentially very profitable, part of Bristol's trade throughout these years. As with the country as a whole, there can be no doubt that growing demand for imported luxuries and raw materials played a significant part in driving the growth of Bristol's overseas trade in the late sixteenth and early seventeenth centuries. Examination of the figures from the Port Books, however, suggests that Sacks was wrong to think that Bristol's trade was entirely import driven in these years. In contrast to London which struggled to find a market for its broadcloth exports in the years after 1614, the expansion in output from agriculture and a broad

[70] Jones, *Inside the Illicit Economy,* pp. 106-7.

range of industries meant that Bristol had access to a range of commodities for export which remained in increasing demand in both Ireland and the continent throughout this period and must also have provided considerable stimulus to the expansion of the city's trade.

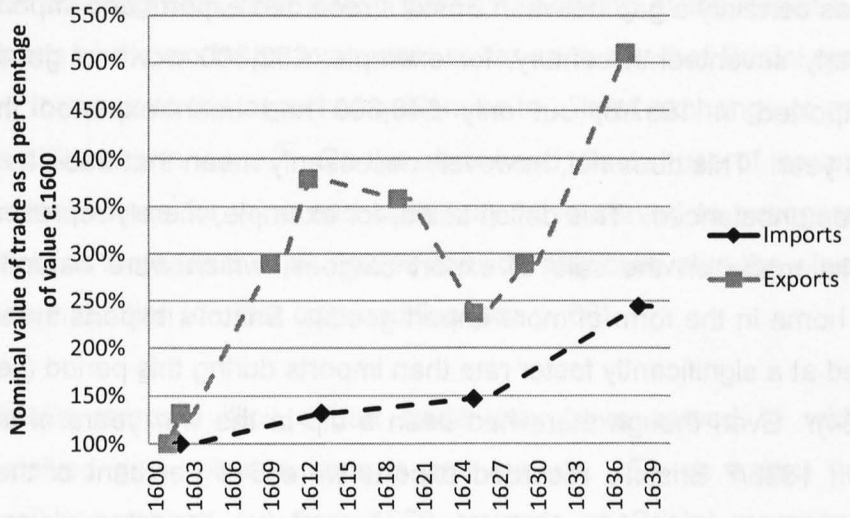

Figure 24 - Bristol's Recorded Imports and Exports as a Percentage of their Value 1600/1-1637/8:[71]

The Markets for Bristol's Trade

The findings from Bristol's Port Books are equally intriguing in terms of the markets with which its merchants were trading. London's traditional markets had faltered during the reigns of James I and Charles I; what growth the capital's commerce did experience resulted from the new long-distance trades. By contrast, Bristol showed little evidence of developing new trade routes, benefitting instead from the rapid growth of trade to its existing markets in Ireland, France and the Iberian Peninsula (see Figure 25), trades that had formed the basis of its commercial world for the previous 200 years.[72]

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[71] http://hdl.handle.net/1983/1308, Sacks, *Widening Gate*, pp. 42-43; TNA PRO E190/1133/1; E190/1133/8; E190/1133/11; E190/1134/3; E190/1134/11; E190/1136/1; E190/1136/3; E190/1136/8; E190/1136/10. See Appendix 1.1.

[72] See: E.M. Carus-Wilson, 'The Overseas Trade of Bristol', in E. Power and M.M. Postan (eds.), *Studies in English Trade in the Fifteenth Century*, (London, 1933), pp. 183-246; Vanes, *The Port of Bristol in the Sixteenth Century*.

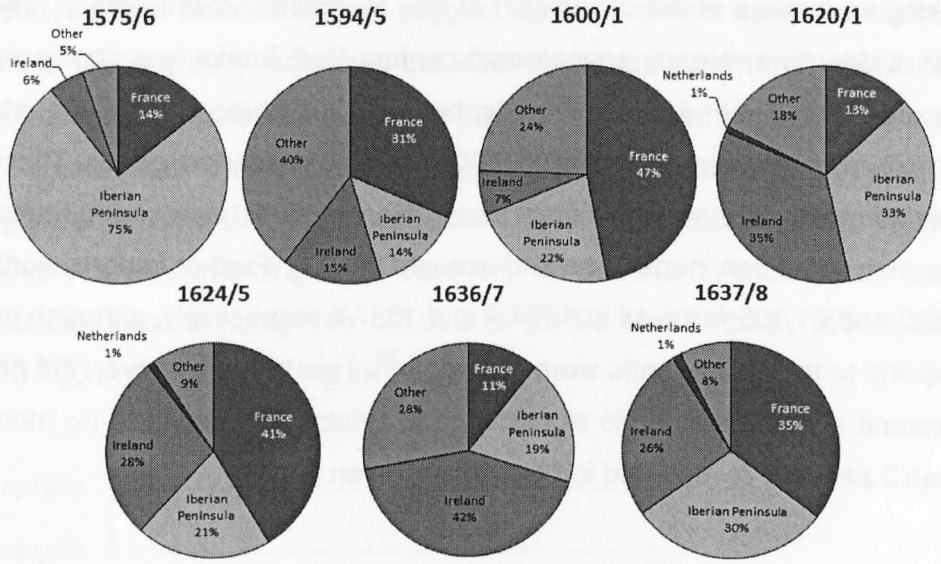

Figure 25 - Bristol's Trade by Country of Origin as Recorded in the Port Books, 1575/6 – 1637/8 (in pounds sterling):[73]

Continental Europe

While London had become virtually dependent on its commercial connections with Antwerp, Bristol had never been involved to any great extent in trade with the Netherlands (see Figure 25). London's advantageous geographical position for trading with the Netherlands, and the exclusive trading rights gained by its politically powerful merchants meant that Bristol simply could not compete in this branch of trade. As has already been seen when considering the cloth export trade, while in the sixteenth century this lack of commercial connections with the Low Countries may have put Bristol at a disadvantage in relation to London, in the difficult years after 1614 its focus on a broader range of markets proved to be an advantage. Although perhaps to a lesser extent than fellow south west port Exeter, Bristol actually seems to have increased its connections with the Netherlands during the 1620s and 30s, possibly

[73] Based on analysis of: http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, 42-43; TNA/PRO, E190/1134/10, E190/1136/8, and E190/1136/10. See Appendix 2.4. In some accounts the customs officers have ceased to record the port of origin/destination, meaning that it has not been possible to produce a market dataset for all years. The 1636/7 chart represents just exports, and 1637/8 just imports; all others show imports and exports combined.

taking advantage of the dislocation of The Merchant Adventurers.[74] The late sixteenth and early seventeenth-century Port Books had shown no recorded trade with the Netherlands, but in 1620/1 three ships came into Bristol from Amsterdam carrying £600 worth of assorted goods These carried mostly raw materials such as tar, Norway deal boards, and hemp, but also some fish, hops, yarn and wrought steel.[75] Further imports worth £800 and £1,100 followed in 1624/5 and 1637/8 respectively, although no exports to the Netherlands were recorded.[76] This trade, however, did not become of great economic significance to Bristol, amounting to no more than 2 per cent of recorded imports in any given year.

While Bristol's west coast outlook proved on the whole to be a disadvantage in trading with the Netherlands, it did mean that the city was geographically well positioned to capitalise on the markets along Europe's Atlantic coast. Trade with these regions in general was experiencing a good deal of prosperity in the late sixteenth and early seventeenth centuries, giving Bristol an advantage over other English ports. Although at times greatly disrupted by lengthy periods of warfare, both Bristol's French and Iberian trades showed considerable expansion during these years, keeping their place as the mainstays of the city's commerce.

Historically trade with the Bordelaise region of France had been the backbone of Bristol's trade, exchanging English broadcloth for Gascon wine. Even though this trade had suffered following the English loss of Gascony in 1453, by the end of the fifteenth century it was beginning to recover something of its old vigour.[77] The mid- sixteenth-century Port Books, however, suggest that Bristol's French trade was suffering, making up less than 12 per cent of declared imports in 1575/6 and 20 per cent of exports (see Figure 25). This trade on the other hand, may have

[74] W.B. Stephens, *Seventeenth Century Exeter: A Study of Industrial and Commercial Development, 1625-1688*, (Exeter, 1958), pp. 26-8.
[75] TNA PRO E190/1134/10.
[76] TNA PRO E190/1136/10, Sacks, *Widening Gate*, pp. 42-3.
[77] Carus-Wilson, 'The Overseas Trade of Bristol', pp. 201-213.

been healthier than the figures suggest, as a raft of new duties introduced in the 1550s greatly increased the incentive to smuggle wine. As Jones has observed, there was a marked decline in declared imports of wine in the years after these additional duties were introduced, suggesting a significant illicit trade had developed.[78] The remainder of the sixteenth century saw something of a recovery in Bristol's French trade, with declared imports rising from £1,900 in 1575/6 to £7,100 in 1594/5 and £15,100 in 1600/1 (see Figure 26).

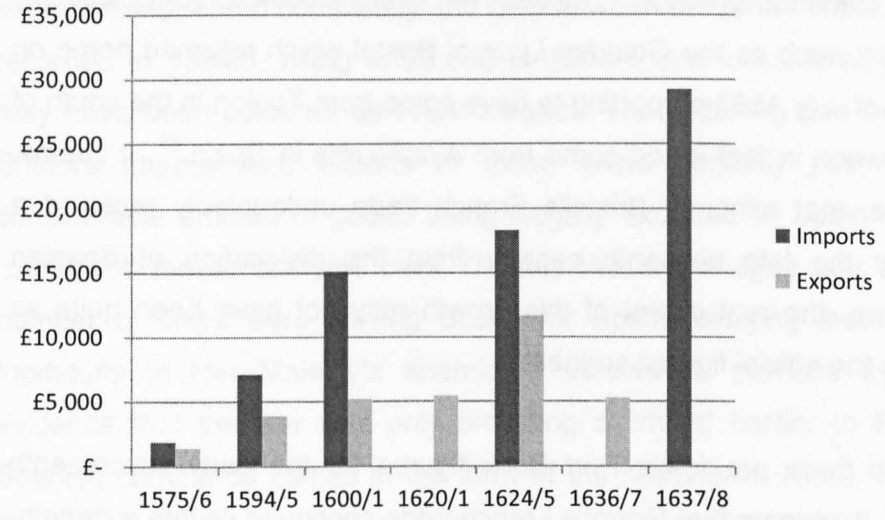

Figure 26 - Bristol's French Trade as Declared in the Port Books, 1575/6-1637/8:[79]

As has been discussed in the previous chapter (see pp. 45-46), in the years after the outbreak of the Anglo-Spanish War in 1585 French trade received a boost as merchants sought safety in trade through neutral French ports rather than risking seizure of their goods in Spain. Examination of the Port Book data for the ports through which French trade was conducted suggests that this practice was fairly common. In particular St Jean de Luz and La Rochelle, two of the ports singled out by Croft as having developed a significant entrepôt trade during the war,

[78] Jones, *Inside the Illicit Economy*, pp. 193-5.

[79] Based on analysis of: http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, 42-43; TNA/PRO, E190/1134/10, E190/1136/8, and E190/1136/10. See Appendix 2.4. Imports for 1620/1 have been omitted, as the Port Book for this year does not record wine resulting in an artificially low total.

came to play a prominent part in Bristol's trade.[80] In earlier and later accounts they play a much less significant role, but in 1594/5 La Rochelle alone accounted for 63 per cent of Bristol's recorded exports to France, and combined with St Jean de Luz also accounted for more than half of French exports in 1600/1. Rather than a genuine growth in trade to France, however, it is also possible that some of this perceived increase was simply the result of merchants declaring a false port of origin/destination in France to cover up an illicit voyage direct to Spain. Former Bristol customs clerk Thomas Watkins certainly alleged that this was a common practice. Indeed he even provided some specific examples, such as the *Goulden Lyon* of Bristol which returned home on the 30th of July 1597 purporting to have come from Toulon in the south of France when in fact it had come from Ayamounte in Spain.[81] It seems, therefore, that although Bristol's French trade undoubtedly received a boost in the late sixteenth century from the dislocation of Spanish commerce, the real extent of this growth may not have been quite as great as the official figures suggest.

Although there are fewer Port Book figures for the early seventeenth century, it appears that Bristol's French trade continued its late sixteenth-century prosperity even after the peace with Spain in 1604. This perhaps suggests that the recorded increase in the previous decade was not entirely a result of Spanish smuggling, and that French trade did have some momentum of its own. Both imports and exports were healthy in 1624/5 (at £18,300 and £11,700 respectively), and a surge in declared wine imports saw Bristol's French import trade as high as £29,200 in 1637/8. French trade never again dominated Bristol's commercial world as it once had; even in 1637/8 imports from France only made up 35 per cent of the total. By the early seventeenth century, however, it appears to have largely overcome its difficult times, and on the eve of the Civil War was again beginning to prosper.

[80] Croft, 'Trading with the Enemy', p. 282.
[81] O. Dunn, 'The Petitions of Thomas Watkins against Customer John Dowle 1598-1600', (BA Thesis, University of Bristol, 2006), pp. 82-4.

Unlike its trade with France, Bristol's Iberian connections were already prospering in the mid-sixteenth century. Imports from both Spain and Portugal topped £6,000 in 1575/6 (see Figure 27), and together they made up almost 80 per cent of Bristol's import trade (see Figure 25). Indeed, as has already been discussed, the momentum behind this trade was so great that Bristol's merchants were prepared to go to great lengths to maintain their Spanish connections in spite of twenty years of Anglo-Spanish War between 1585 and 1604. Unsurprisingly declared exports disappeared completely, but £4,800 worth of Iberian imports were recorded in 1594/5, rising to £9,500 in 1600/1, and considerably more may have been coloured as French trade. The widening gap between Bristol's imports and exports in these years certainly points to a considerable amount of goods being illegally exported to Spain. In his 'complaint' former customs clerk Thomas Watkins alleged that a great number of ships were leaving Bristol for Spain, carrying leather and foodstuffs to Her Majesty's enemies.[82] However, perhaps the best evidence that the war was only providing a limited barrier to Bristol's Spanish commerce comes in the form of the *Marchant's Avizo,* a guide for young merchants acting as factors overseas written by the successful Bristol merchant John Browne.[83] It was first published in 1589, just four years after the outbreak of war, but deals largely with Spanish and Portuguese trade. The *Avizo's* immediate popularity suggests that trade with Spain was still very much a current activity, with new editions being produced in 1590 and 1591. It also includes some sample sets of accounts which appear to deal with real ships and consignments and are dated during the war years, clearly showing that Spanish commerce continued in spite of the conflict.[84]

[82] Dunn, 'The Petitions of Thomas Watkins', pp. 82-4.
[83] P.V. McGrath (ed.), John Browne, *The Marchants Avizo, (Cambridge, 1957).*
[84] McGrath, *Marchants Avizo,* p. xxiii.

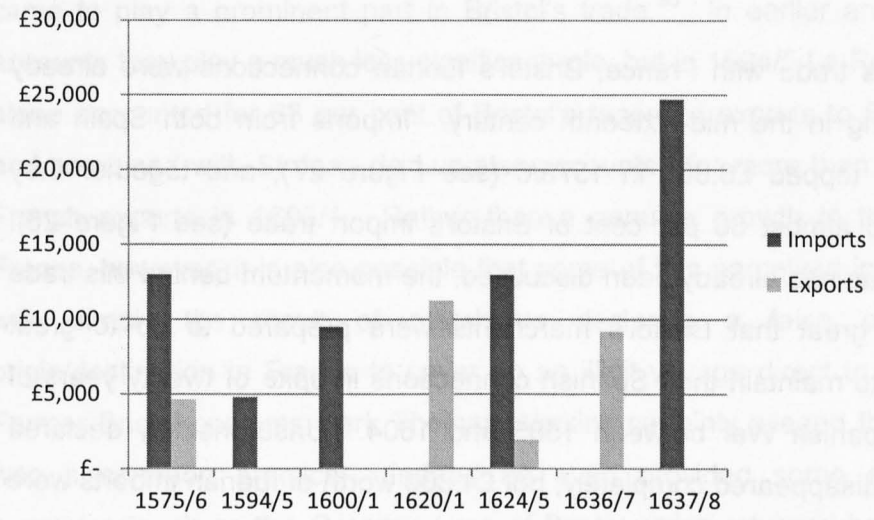

Figure 27 - Bristol's Iberian Trade as Declared in the Port Books, 1575/6-1637/8:[85]

The surviving figures for the early seventeenth century are perhaps a little misleading in terms of Bristol's Iberian trade. Declared exports were up considerably to £11,800 in 1620/1 (compared to £4,600 in 1575/6), but the trade was then severely disrupted by the outbreak of another war between England and Spain in 1625. Imports remained relatively healthy at £13,000 as merchants sought to get their profits home before the conflict intensified, but exports were down considerably to £1,900. The figures from the 1630s, however, show that this was just a temporary setback. Bristol exported £9,200 worth of goods to the peninsula in 1636/7, and in the following year imports totalled £24,700 (almost a third of the total). Although at times vulnerable to disruption by warfare, the overall trend of Bristol's Spanish trade in the late sixteenth and early seventeenth centuries was clearly one of prosperity and continued expansion. Combined with increasingly healthy connections with France, these two trades, as they always had done, formed the backbone of Bristol's commercial expansion in these years, a clear contrast with the troubled times London was experiencing with its traditional Dutch markets.

[85] Based on analysis of: http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, 42-43; TNA/PRO, E190/1134/10, E190/1136/8, and E190/1136/10. See Appendix 2.4. Imports for 1620/1 have been omitted, as the Port Book for this year does not record wine resulting in an artificially low total.

Ireland

While Bristol was very successful in its continental trade in the early seventeenth century, the most dynamic element of its overseas commerce lay much closer to home. Trade with Ireland had long been important to Bristol,[86] but in this period it underwent significant growth, both in terms of gross value and its importance relative to Bristol's other markets (see Figure 25 and Figure 28). Although the trade between Bristol and Ireland had been buoyant in the first half of the sixteenth century, it suffered a severe decline during Elizabeth's reign. The result was that by 1600/1, voyages to and from Ireland accounted for only 3 per cent of the city's overseas trade with just £400 worth of goods imported and £850 exported. In the first four decades of the seventeenth century, on the other hand, this trade expanded enormously in both absolute and relative terms. Imports from Ireland grew to £12,300 in 1624/5 and almost £21,500 in 1637/8 (54 times their value sixty years earlier), making up around 25 per cent of Bristol's total imports in both years. Bristol's exports to Ireland experienced a similar growth, reaching £20,600 in 1636/7 and accounting for 42 per cent of all Bristol's exports. The driving force behind this increase probably lay in the rapid development of the Irish economy following the Nine Years' War (1594-1603). In particular, the greater political stability that followed the subjugation of the Gaelic Irish, combined with the forms of investment undertaken by the 'New English' Protestant colonizers, meant that the Irish economy, and its agricultural sector in particular, underwent rapid commercialization and expansion.[87] This growth of the economy, combined with the island's increased inclination to trade, is likely to have accounted for the rapid growth of trade between Ireland and Bristol during the early seventeenth century.

[86] See: Carus-Wilson, 'The Overseas Trade of Bristol', pp. 191-201.
[87] Raymond Gillespie, *The Transformation of the Irish Economy, 1550-1700* (Dublin, 1998), pp. 19-29.

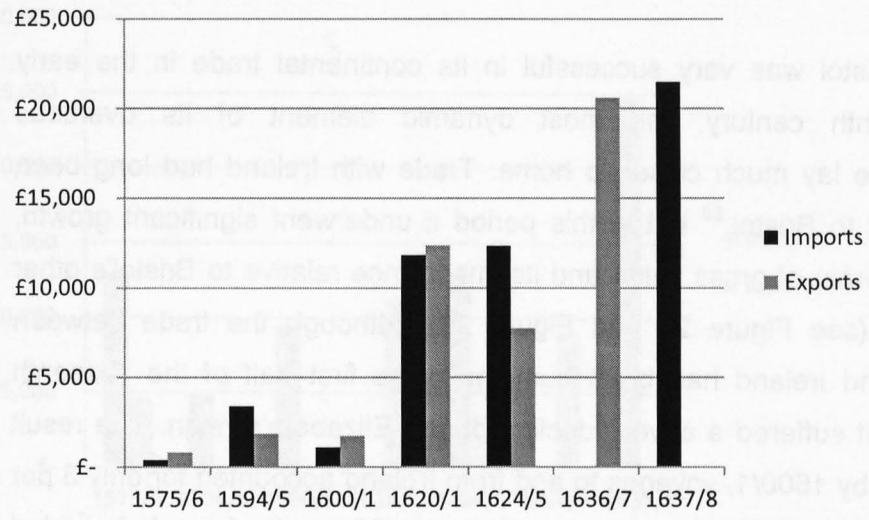

Figure 28 - Bristol's Trade with Ireland as Declared in the Port Books, 1575/6-1637/8:[88]

Due to the bewildering variety of commodities involved, examination of Bristol's exports to Ireland is a study in itself, and in the early seventeenth century this process is further complicated by the growing tendency of the customs officers to lump items together under the generic label 'wares': this category made up 84 per cent of exports to Ireland in 1636/7. Nonetheless, the figures do provide a tantalizing hint at the continuation of the late sixteenth century growth of consumer culture in Ireland which has recently been noted by Susan Flavin.[89] The final export account prior to the Civil War showed as much as £280 worth of tobacco bound for Irish shores, along with a wide variety of cloth from across England and Europe and, most notably, almost £17,400 of manufactured 'wares' (see Figure 29). Unfortunately it is only possible to speculate on the nature of these 'wares', although Flavin's analysis of the late sixteenth century customs accounts when the customs officers were more diligent reveals a wide array of cloth, clothing and accessories, pieces for dress making, food and drink, and domestic utensils.[90] It is highly likely that some of these items would have been produced/manufactured locally providing increased stimulus to the local economy, although many items certainly

[88] Based on Analysis of: <http://hdl.handle.net/1983/1305>; <http://hdl.handle.net/1983/1306>; <http://hdl.handle.net/1983/1307>; <http://hdl.handle.net/1983/1308>; Sacks, *Widening Gate*, 42-43; and TNA/PRO E190/1134/10, E190/1136/8 and E190/1136/10. See Appendix 2.4.
[89] Flavin, 'Consumption and Material Culture', pp. 1144-1174.
[90] Flavin, 'Consumption and Material Culture', pp. 1149-1159.

originated on the continent, often being brought overland from London to Bristol's two fairs in January and July.[91]

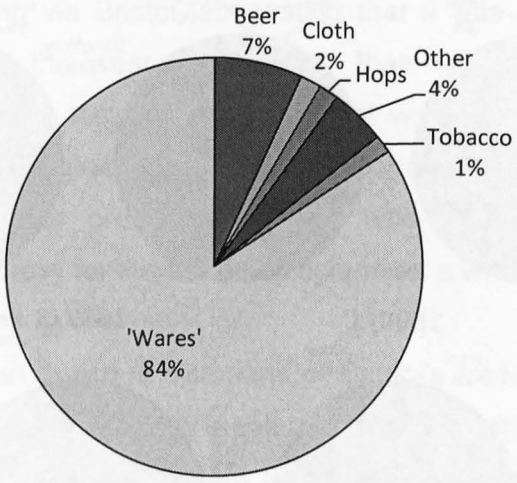

Figure 29 - Bristol's Exports to Ireland in 1636/7 (in pounds sterling):[92]

The range of Bristol's imports from Ireland is testament to Ireland's improved agricultural output, with animal skins (mostly sheep and goat skins) and wool comprising over 50 per cent of Bristol's imports from Ireland in 1637/8 (see Figure 30). In addition, considerable quantities of beef were imported (as much as £1,000 worth in 1637/8) alongside other agricultural produce such as tallow, butter and rape. Perplexingly, on the other hand, there is no evidence of any trade in Irish sheep and cattle. At Chester, the other major port in Anglo-Irish commerce, a significant livestock trade had developed in the middle or latter years of James I's reign, and quickly eclipsed the trade in other commodities.[93] Quite why Bristol does not appear to have developed a similar trade is not entirely clear, although it is possible that for some reason it was simply not recorded in the Port Books. Finally, trade with Ireland was not entirely confined to the export of agricultural goods. Exports of low-grade cloth worth £4,800 in 1637/8 (22 per cent of all Irish imports) testify to the survival of some manufacturing industry in Ireland.

[91] Flavin, 'Consumption and Material Culture', pp. 1163-5.
[92] Source: TNA PRO E190/1136/8. See Appendix 2.5.1. The great variety of goods exported to Ireland in the late sixteenth century (prior to the customs officers' decision to lump them under the label 'wares') means that it is not practical to present Bristol's late sixteenth century Irish exports graphically.
[93] Woodward, 'The Overseas Trade of Chester', pp. 34-6.

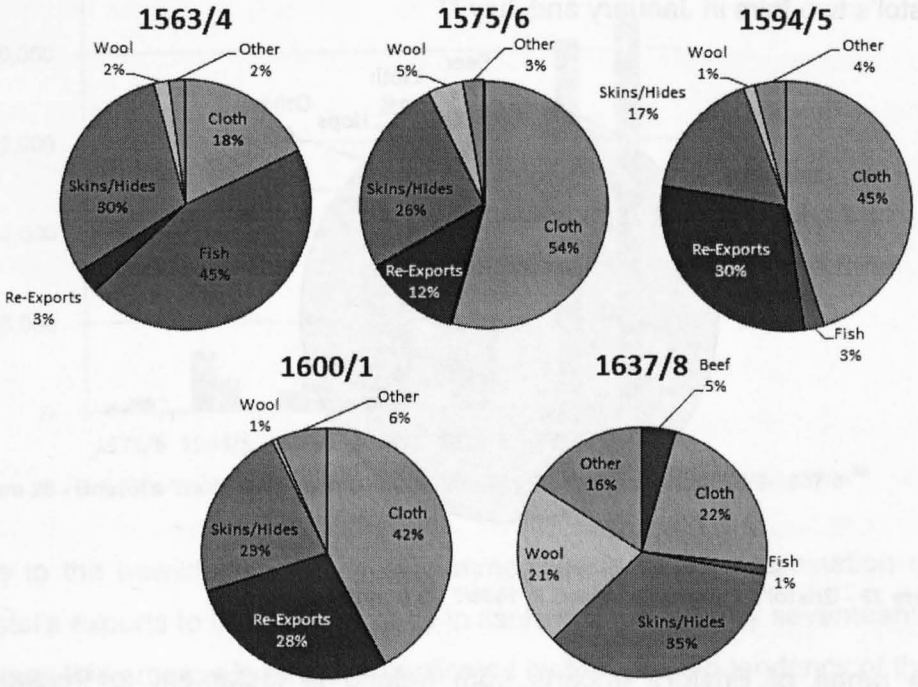

Figure 30 - Bristol's Irish Imports as Recorded in the Port Books, 1563/4-1637/8 (in pounds sterling):[94]

The buoyant Irish trade is particularly important in understanding Bristol's commercial success relative to other ports in this period, as for geographical reasons it was largely restricted to west coast ports such as Bristol and Chester. Indeed D.M. Woodward has even gone so far as to suggest that 'any real impetus in the trade of Chester [in the early seventeenth century] came from the port's connection with Ireland rather than from trade with the continent', with Irish trade making up the majority of Chester's overseas commerce.[95] Positioned on the far side of the country, on the other hand, it is hardly surprising that London merchants showed little interest in this trade. Many of the goods involved in Irish trade were bulky and of relatively low value, so ports such as Bristol and Chester which were just a day's sail from the Irish coast had a considerable advantage compared to the longer and comparatively more expensive voyage round the south coast and Cornwall from London.

[94] Based on analysis of: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1136/8. See Appendix 2.5.2.

[95] Woodward, 'The Overseas Trade of Chester', p. 32.

Indeed Flavin's analysis of Bristol's exports to Ireland shows many goods which can only have come into the country through London being exported to Ireland via Bristol, suggesting that it was cheaper to carry them overland to the west coast rather than re-export directly from London.[96] As it was largely the west coast which felt the benefit, the influence of this strengthening of the Irish economy has, therefore, been largely overlooked by previous historians who assumed that London could stand as a proxy for the trade of England as a whole.

To an extent, even previous historians of Bristol's trade have tended to ignore developments in the city's commercial links with Ireland. When discussing Bristol's trade in 1624/5 Sacks merely commented that 'the picture for the Irish trade is virtually the same as in 1575-76', although it had in fact seen a 16 fold increase in value, rising from £1,200 in 1575/6 to £20,100 in 1624/5.[97] On the whole he paid little attention to Irish trade suggesting that 'virtually all of this traffic was in the hands of the Irish themselves' and that 'Irish trade only complemented Bristol's traffic with European markets'.[98] This characterisation, however, is incorrect. As Figure 31 shows, although Irish merchants had dominated the trade in the late sixteenth century, in the late 1630s they were responsible for less than 49 per cent, with much of the remainder being conducted by English merchants. Interestingly it does not seem to have been the major Bristol merchants who were becoming involved in this trade. The lack of any domicile and occupation data in the seventeenth-century Port Books means that it is not easily possible to find out who the individuals conducting trade were, however comparison to a membership list for the Society of Merchant Venturers of Bristol shows that members of the society imported just £1,200 worth of goods from Ireland in 1637/8 (less than 6 per cent of all Irish imports).[99]

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[96] Flavin, 'Consumption and Material Culture', p. 1164.
[97] Sacks, *Widening Gate*, p. 41. Figures from: <http://hdl.handle.net/1983/1305>, <http://hdl.handle.net/1983/1306>, and TNA PRO E190/1135/6.
[98] Sacks, *Widening Gate*, pp. 39-40.
[99] Based on a comparison of: TNA PRO E190/1136/10 and McGrath, *Records*, pp. 27-9, 261.

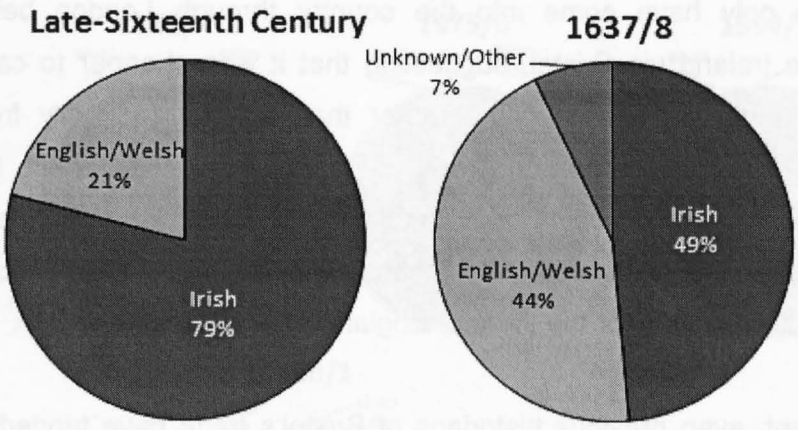

Figure 31 - Bristol's Irish Imports by Merchant Origin as Recorded in the Port Books, 1575/6-1637/8 (in pounds sterling):[100]

Irish shipping also appears to have been much less dominant in the Irish trade than it had been in the mid-sixteenth century (see Figure 32). In both 1563/4 and 1575/6 Irish shipping had carried as much as 80 per cent of Bristol's imports from Ireland, but this declined steeply during the Nine Years War (1594-1603) with the Irish share dropping to 55 per cent in 1594/5 and 24 per cent in 1600/1. Although Irish shipping expanded considerably in the early seventeenth century (carrying £8,600 worth of goods in 1637/8 compared to a high of £1,800 in the late sixteenth-century Port Books) it appears that it did not regain its former dominance in trade with Bristol. In 1637/8 Irish ships carried just 40 per cent of the trade between Ireland and Bristol, with English (36 per cent) and Welsh (20 per cent) shipping making up the bulk of the trade.

[100] Derived from: <http://hdl.handle.net/1983/1305>; <http://hdl.handle.net/1983/1306>; <http://hdl.handle.net/1983/1307>; <http://hdl.handle.net/1983/1308>; TNA PRO E190/1136/10. See Appendix 2.5.3. The seventeenth-century Port Books lack the merchant domicile which was recorded in the late sixteenth century, simply noting whether merchants were 'Indigenous' or 'Alien'. The 1637/8 book does, however, include the letters 'ir' after many of the names. As these occurred virtually exclusively in the Irish trade, and the names are often Irish in character, it is reasonable to suppose that this denoted Irish merchants.

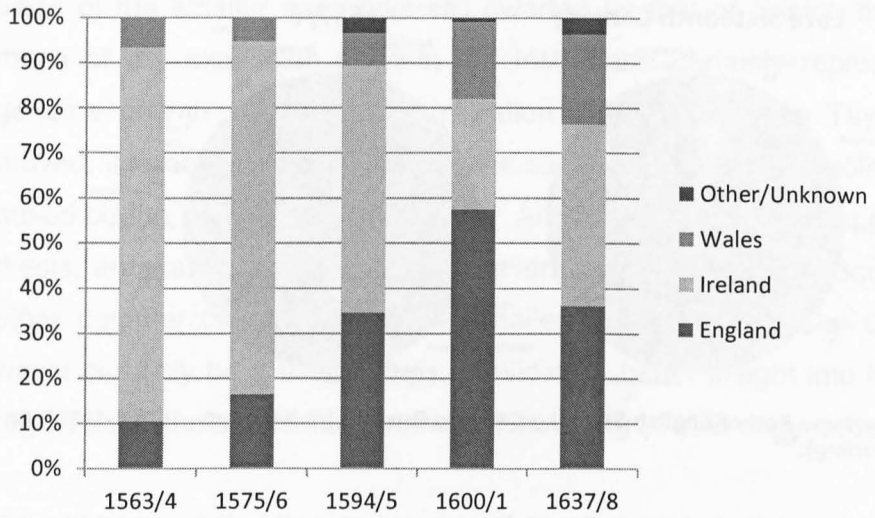

Figure 32 - Bristol's Irish Imports by Origin of Ship as Recorded in the Port Books, 1563/4-1637/8:[101]

It seems to have been the smaller Bristol Channel ports, rather than Bristol itself, which felt the benefits of this new English involvement in Irish shipping (see Figure 33). In the late sixteenth century Bristol had contributed almost half of the English shipping involved in the Irish trade. In 1637/8, however, Bristol ships carried just £225 worth of goods back from Ireland, little more than 1 per cent of all Irish imports. In all, ships from fourteen different English ports were involved in importing goods from Ireland to Bristol in this year, many of them on a significant scale. Newnham ships freighted £1,800 worth of goods; those from Tewkesbury and Elmore both around £900; and Bridgwater, Ilfracombe, Minsterworth, Radley, and Westbury-on-Severn all passed the £400 mark. Welsh ports also made a significant contribution, with Milford Haven ships carrying £3,600 worth of goods, and those from Aberthaw £650.

[101] Derived From: <http://hdl.handle.net/1983/1303>; <http://hdl.handle.net/1983/1304>; <http://hdl.handle.net/1983/1305>; <http://hdl.handle.net/1983/1306>; <http://hdl.handle.net/1983/1307>; <http://hdl.handle.net/1983/1308>; TNA PRO E190/1136/10. See Appendix 2.5.4.

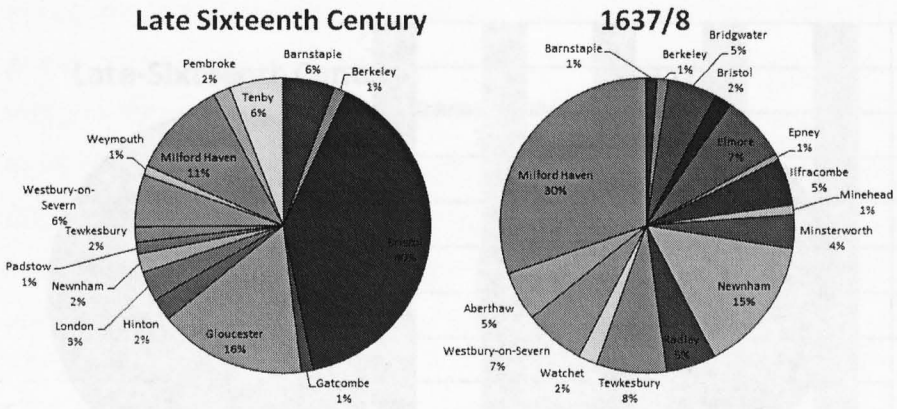

Figure 33 - Home Port of English Shipping Carrying Bristol's Irish Imports, 1575/6-1637/8 (in pounds sterling):[102]

The wide involvement in Bristol's early seventeenth-century Irish trade makes for an interesting comparison with the work of Duncan Taylor, who studied in detail the maritime activities of the smaller Bristol Channel ports in the sixteenth century. Taylor has shown that by the end of the sixteenth century the smaller ports had a much more vibrant trade than has often been supposed, with their own unique trading profiles and strong independent links to foreign ports.[103] From these Bristol figures it is clear that the shipping industry of these smaller ports had continued to develop in the early seventeenth century, benefitting from newfound prosperity in the Irish trade. This does not, however, mean that the trade of the smaller ports themselves benefitted. It may be that these figures reflect Bristol becoming increasingly dominant of trade in the region, with Irish commerce becoming gradually more focused on the city's two great fairs in January and July.[104] The smaller ports may thus have been becoming mere satellites, whose ships serviced the trade of their larger neighbour rather than maintaining their own direct links as Taylor described in the sixteenth century. This may mean that a portion of the growth in recorded Irish trade through Bristol was simply ships which had previously been sent to the smaller ports being diverted up the Avon to Bristol. Even combined, however, at the end of the sixteenth century the

[102] Derived from: <http://hdl.handle.net/1983/1305>; <http://hdl.handle.net/1983/1306>; <http://hdl.handle.net/1983/1307>; <http://hdl.handle.net/1983/1308>; TNA PRO E190/1136/10. See Appendix 2.5.4.
[103] Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports', pp. 242-3.
[104] Flavin, 'Consumption and Material Culture', p. 1164.

trade of the smaller ports was still dwarfed by that of Bristol, therefore much of the expansion seen in the Irish trade certainly represents a genuine growth rather than a migration to Bristol.[105] As Taylor has proved, it is not possible to assess the state of trade in the whole region based on the records of Bristol alone. Although beyond the scope of this thesis, an examination of the early seventeenth-century Port Books and other commercial records for the smaller ports of the Bristol Channel would certainly be a useful study, providing a better insight into how the region as a whole benefitted from the flourishing of Irish commerce.

Overall it seems that to merely write off developments in the Irish trade as simply benefitting Irish merchants and shipping is something of an oversimplification. Detailed analysis of the Bristol Port Books not only reflects the significant economic developments which were occurring in Ireland during these years, but also highlights the benefits of these to the English economy; for example by providing a market for considerable quantities of manufactured 'wares'. Moreover, it shows that it was not just Bristol and its rich merchant elite who benefitted from the prosperity of this trade in the early seventeenth century. The growth of Irish trade through Bristol's fairs provided a great stimulus to commerce and shipping in ports all around the Severn Sea.

New Markets

While the prosperity of Bristol's regular trades to Ireland, France, and the Iberian Peninsula is clear, on the whole there is little evidence in the Port Books of the 'significant changes within [Bristol's] structure of commerce' which Sacks suggested occurred during this period.[106] As Sacks pointed out, there are occasional records of trade with further flung destinations (see Figure 34), but these rarely amounted to more than 1 or 2 per cent of Bristol's overall trade. Even when combined, trade from outside Bristol's core three markets never amounted to more than 10.6 per cent of all recorded imports and exports in any given year. On the whole the

[105] Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports', p. 5.
[106] Sacks, *Widening Gate*, p. 40.

pattern seems to be much the same as it had been since the fifteenth century, with Bristol's trade dominated by its traditional markets along Europe's Atlantic coast.

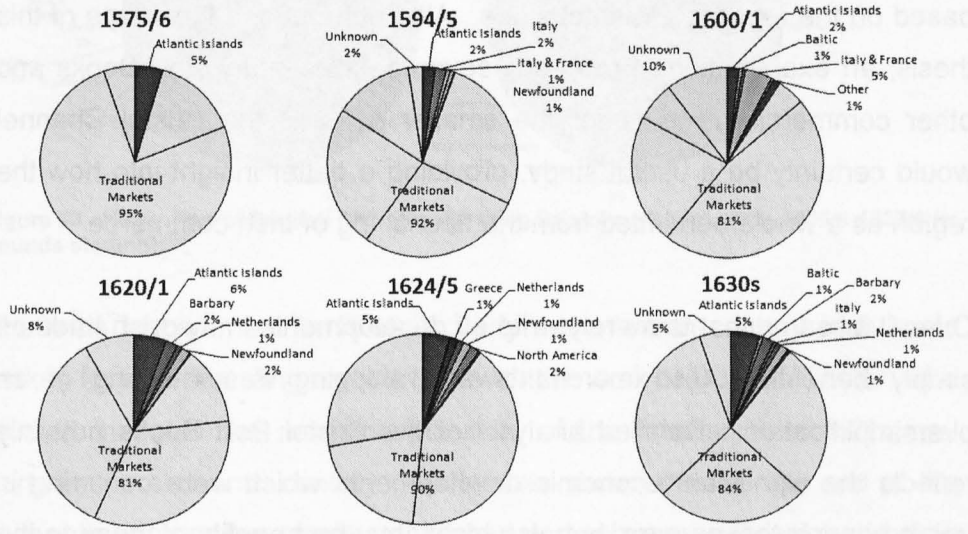

Figure 34 - Bristol's Trade by Market as Recorded in the Port Books (New Markets), 1575/6-1637/8 (in pounds sterling):[107]

As has been discussed above (see p. 81) from the 1620s onwards Bristol began to see the arrival of a few ships from the Netherlands. There was also some occasional engagement with the Baltic, for example the *Goodwill* of Bristol which returned from Norway in 1637/8 carrying £730 worth of masts and deal boards.[108] This, however, was far from being a regular trade. In 1600/1 £237 worth of goods had been imported from the Baltic, and £190 in 1624/5, but there were none in 1620/1 and this never accounted for more than 0.6 per cent of Bristol's trade. There is also some evidence of Bristol merchants trying to trade with Africa, with £1,400 worth of goods sent to 'Barbary' in 1620/1, and £2,500 in 1636/7 (2 per cent of trade in each year). The lack of regular data is a little frustrating in this regard, but again this would appear not to have become

[107] Combined figures for imports and exports. The privateering category 'The Sea' has been included in traditional markets as it consisted primarily of Iberian commodities. The 1630s chart shows exports from 1636/7 combined with imports from 1637/8. Sources: http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, pp. 42-43; TNA/PRO, E190/1134/10, E190/1136/8, and E190/1136/10. See Appendix 2.4.

[108] TNA PRO E190/1136/10, f24v.

a regular trade; no imports were ever recorded, and there were no exports in 1624/5. In 1624/5 £1,150 worth of tobacco was imported from the Somers Island colony in North America, 2.5 per cent of Bristol's imports in that year. This, however, was made up by just two consignments on one ship, totalling little more than 5,000 lb. It also does not appear to have been representative of the development of a permanent trade, as 1637/8 saw just £60 worth of imports recorded from the American colonies. This lack of early involvement in American trades is perhaps a little surprising bearing in mind their importance to Bristol's future, and will be discussed in more detail in the next chapter (see pp. 127-132). On the whole, however, it fits in with the general pattern of limited involvement in new ventures which characterised Bristol's trade before the Civil War.

The only aspect of American commerce which Bristol appears to have shown any sustained interest in during the early seventeenth century was the Newfoundland fisheries, and even here Bristol seems to have been involved to a lesser extent than other West Country ports. As ships usually went out in ballast and duties were not paid on their catch, it is very difficult to trace the evolution of Bristol's Newfoundland trade using the Port Books, although the presence of commodities such as train oil did result in a few ships being recorded on their return from the banks each year. On the whole, however, Bristol appears not to have been involved to the same extent as some smaller ports such as Plymouth and Dartmouth, which could be virtually taken over by the fishing fleet during September and October.[109] In 1638, for example, only 3 ships returned directly from Newfoundland to Bristol compared to 22 to Dartmouth and 25 to Plymouth.[110] Like Bristol's other lesser trades discussed in the preceding section, this trade appears to have been fairly regular, although only of marginal economic significance.

[109] Gillian T. Cell, *English Enterprise in Newfoundland, 1577-1660* (Toronto, 1969), p. 5; Peter E. Pope, *Fish into Wine: The Newfoundland Plantation in the Seventeenth Century* (Chapel Hill, NC, 2004), pp. 93; and Ramsay, *English Overseas Trade*, p. 141.
[110] Cell, *English Enterprise*, p. 140.

Of the new markets mentioned by Sacks, only trade with the Atlantic Islands (the Azores and Canaries) appears to have developed on any significant scale. Ships from thence were a fairly regular feature from 1575/6 through to the late 1630s, and accounted for as much as 5 per cent of Bristol's trade in some years. This, however, is dwarfed in comparison to the growth of Bristol's existing trades, and examination of the commodities involved shows the same fruits and wine which Bristol acquired in Spain, suggesting that it represents an incremental expansion of Bristol's Iberian trades, rather than a bold break into the unknown searching for exotic wares.

There is also limited evidence for the shift into the Mediterranean described by Sacks.[111] To an extent, Bristol's merchants do seem to have focused more on the south of the Iberian Peninsula by the 1630s, with ports such as Cadiz and Malaga becoming more important, but even so they still do not seem to have ventured much further east than Gibraltar (see Figure 35). To an extent this may, as Sacks suggested, represent a desire to cut out the middleman in purchasing goods produced further south in the Peninsula, but it may also be a result of a decline in the trade in Basque iron. Beyond Spain, there is some limited evidence of Bristol merchants showing an interest in trade with Italy. Almost £700 worth of goods were sent to the new Italian entrepôt Leghorn (Livorno) in 1636/7, and there had been a similar phase of interest in 1594/5 and 1600/1 during the Anglo-Spanish War. As with most of Bristol's other 'new' trades, however, these voyages do not appear to have developed into a regular trade, and they were never of great economic importance. Perhaps more significant is the development of some trade with the Provençal ports of Marseilles and Toulon, which accounted for as much as £6,000 worth of imports and £5,300 worth of exports in 1624/5 (the year examined by Sacks). Again, however, the commodities involved in these voyages are the same fruit and oil (although not wine) of the Iberian trade, not exotic Mediterranean

[111] Sacks, *Widening Gate,* pp. 41-44.

luxuries, so it seems more appropriate to once more class this as an incremental expansion of the existing Iberian trade. This is particularly the case in the turbulent 1620s, a time when war with Spain would have forced Bristol's merchants to seek safer alternative markets. It is notable that trade with Toulon was only recorded during times of war, and indeed it is known to have been used as a cover for illicit voyages to Spain. Trade with Marseilles was also greatly reduced during peacetime with exports of just £2,400 in both 1620/1 and 1636/7. It seems, therefore, that by examining figures from just one year at a time when Bristol's normal trading patterns were disrupted, Sacks' data exaggerated this apparent shift into the Mediterranean.

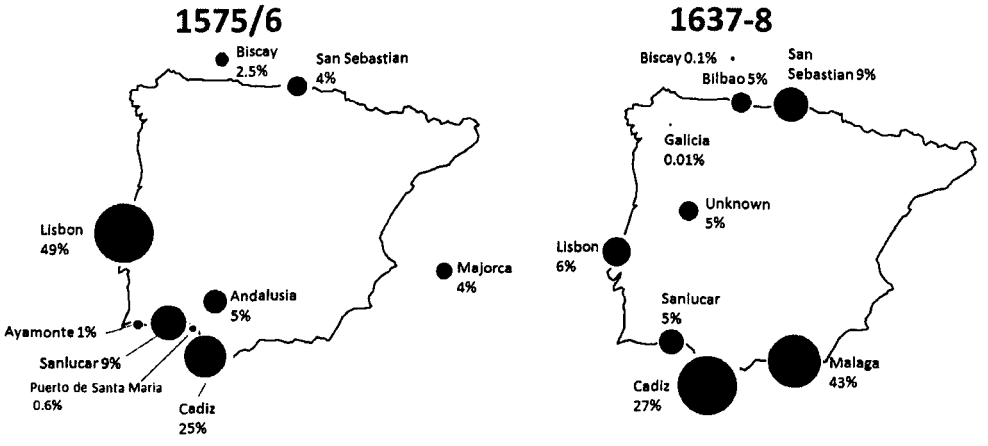

Figure 35 - Bristol's Trade with Iberia by Region as Declared in the Port Books 1575/6 and 1637-8 (in pounds sterling):[112]

The lack of recorded activity does not, of course, mean that Bristol merchants were not showing a greater interest in Mediterranean trade. In March 1625, for example, according to Adams' Chronicle the Chief Basha of Constantinople was 'royally entertained' by the Mayor and many of Bristol's merchants who would 'not suffer him, or any of his followers to spend one penny' in the city. The Basha was given a gift by the merchants of a good gelding to carry him on the remainder of his journey to London 'fitted with rich furniture beseeming his greatnes and theire credit', and he was treated by them to supper at his lodgings 'with

[112] http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; and TNA/PRO, E190/1136/8 and 1136/10. See Appendix 2.6.

admirable cost, & provision uppon so short a warning'.[113] Although the Basha's principle reason for visiting England was to bring gifts to the newly crowned king, the enthusiasm with which Bristol's merchants took to entertaining him certainly suggests that they were keen to cultivate influential connections in the East.

Bristol's long standing legal battles with the Levant Company to gain the right to trade to its monopoly protected areas are also well documented.[114] Indeed in 1618 the Society of Merchant Venturers petitions to the Privy Council gained a degree of success, with Bristol's merchants being granted the right to import 200 tons worth of currants a year (one of the most sought after commodities of the Levantine trade) in return for the payment of an imposition of 4d. per cwt to the company.[115] According to the Book of Rates valuations 200 tons of currants would have been valued at £6,000, so this would have made a significant contribution to Bristol's import trade (about 12 per cent of Bristol's total imports in 1624/5).[116] Two ships were sent to the Levant in both 1618 and 1619 to exercise this right, in the latter year carrying goods worth £5,406.[117] A letter from the Levant Company to the aldermen of Bristol in 1632 complaining of the non-payment of duty on imports of currants suggests that the trade was maintained for at least the next sixteen years.[118] The Port Books, however, are curiously silent on this trade, perhaps reflecting the desire of Bristol's merchants to keep their currant imports out of the records as they sought to evade paying the duty. In 1624/5 £900 worth of imports from Candia (Crete) are recorded, but this was 100 tons of Muscadel wine, not currants.[119] In 1637/8 just £46 worth of imports from Greece were recorded, and these were on a London ship

[113] BRO 13748/4.
[114] P. McGrath, *The Merchant Venturers of Bristol: A History of the Society of Merchant Venturers of the City of Bristol from its origin to the present day*, (Bristol, 1975), pp. 55-7; Charlie Gent, 'The case of currants: The Levant Company monopoly as a stimulus for Bristol's illicit trade 1590-1666' (unpublished undergraduate Special Field Project, University of Bristol, 2009).
[115] Gent, 'The case of currants', pp. 3-5. See: BRO SMV/2/1/1/34, pp. 51-4.
[116] '1604 Book of Rates'
[117] Gent, 'The case of currants', p. 9. See: M. Epstein, *The English Levant Company: Its Foundation and its History to 1640*, (London, 1908), p. 113.
[118] BRO SMV/2/1/1/34, pp. 205-6.
[119] Sacks, *Widening Gate*, p. 43.

rather than one from Bristol.[120] A degree of illicit activity may, therefore, mean that Bristol's Mediterranean trade was greater than the official figures suggest in the 1620s and 30s, although it is still unlikely to have contributed more than 10 per cent or so to the overall value.

Conclusions

Overall, therefore, examination of Port Book data for the markets and merchandise involved provides a far better explanation of why Bristol's overseas trade experienced such prosperity in the late sixteenth and early seventeenth centuries than is possible by simply looking at the yearly totals. With regard to commodities, Sacks was right to suggest that a considerable amount of the impetus behind Bristol's trade came from the quest for high value imported goods. England experienced something of a consumer revolution during these years, and the rise of both imported luxuries and raw materials is clear to see in the Bristol Port Books. He was, however, wrong to play down the strength of Bristol's export trade in these years. In the early seventeenth century Bristol's exports expanded at a rate which was at least equal to the growth of imports. Far from being forced to cobble together export cargoes, Bristol appears to have in fact benefitted in the long run from London's monopolisation of the broadcloth trade. Bristol merchants exported a diverse range of agricultural goods, as well as manufactures and minerals from a wide array of expanding industries, meaning that it had a broad range of exports which remained in demand on the continent even when the traditional broadcloth trade went into decline.

In terms of markets, it seems that Sacks may have been a little hasty to suggest that there had been 'significant changes within [Bristol's] structure of commerce'.[121] Although Bristol merchants certainly did show an interest in other branches of trade, these never accounted for much more than 10 percent of the recorded total, and the focus remained squarely on Bristol's traditional markets in France, Ireland, and the

[120] TNA PRO E190/1136/10.
[121] Sacks, *Widening Gate*, p. 40.

Iberian Peninsula. Indeed, dabbling into trades outside their traditional haunts was nothing new for Bristol's merchants. Examining the ports of origin and destination of voyages in the 1590s Vanes noted: 'voyages to Italy and the Levant, the Atlantic Islands and very occasionally to Guinea, as well as the appearance in the port of some Dutch and Scandinavian ships' showing 'the widening horizon of Bristol's trade'.[122] That by the 1630s such voyages had been occurring for more than forty years without becoming firmly established perhaps suggests that they were more along the lines of experimental ventures than regular trades. Indeed speculating on such ventures had long been a part of Bristol's commercial heritage, for example the voyages of Cabot in the 1490s searching for a route to the East, or Sturmy's voyages into the Mediterranean in the 1440s and 50s. On the whole on the eve of the Civil War little appears to have changed since the fifteenth century when Eleanor Carus-Wilson has suggested that Bristol 'carved out routes of her own, neither in the North Sea nor in the Mediterranean, but on the eastern shores of the Atlantic Ocean', choosing not to trouble itself with the spheres of the powerful Italian and Hanseatic merchants who dominated European trade at the time.[123] Bristol's merchants may have cast envious eyes at the London monopolies, and occasionally launched speculative ventures in search of even greater profits, but on the whole the prosperity of their core trades meant that they had little need of new markets.

The above analysis of the customs data has certainly clarified Bristol's commercial history in these years, but it may also prompt questions about accepted knowledge of trade and the economy in the nation as a whole. The evidence from Bristol suggests that it is inappropriate to assume that London can be used as a mirror of the outports in this period. While goods passing through the capital certainly formed the vast majority of England's overseas trade, after all, Bristol's exports in the late 1630s represented a little less than 4.5 per cent of those passing through the

[122] Vanes, *Port of Bristol*, pp. 25-6.
[123] Carus-Wilson, 'The Overseas Trade of Bristol', p. 183.

capital.[124] This complete dominance, however, was beginning to diminish, and trends in at least one of the outports can be shown to have taken a markedly different course to that of London's, with Bristol's export growth outstripping that of the capital by a considerable margin. Perhaps most crucial, however, are the differences in commodities and markets which drove their respective trades. Bristol's vibrant range of exports (manufactured as well as agricultural) is in stark contrast to the cloth monoculture which typified London's exports, and whereas London experienced success in exploiting new, long-distance routes to replace its faltering Netherland's trade, Bristol's success was firmly rooted in its traditional markets on Europe's Atlantic coast. As will be seen in the following chapters, this continued focus on Europe's Atlantic fringe made Bristol well positioned to exploit the growing opportunities of the Atlantic economy from the mid-seventeenth century.[125]

It might be possible to get carried away with the implications of these findings from Bristol. If one outport was expanding its trade while the capital struggled, might not the same be happening elsewhere? Such studies as have been conducted of other ports certainly suggest that, due to their differing geographical and political situations, they too had greatly differing experiences from that of London.[126] These studies, however, like previous examinations of Bristol's trade, often fail to utilize the Port Books or exploit them to their full potential. It would, therefore, be rash to use this evidence from Bristol to make wider claims about what was happening elsewhere. It seems, however, that the time may be ripe for detailed studies of other ports.

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[124] Bristol exported £48,500 worth of goods in 1637, 4.46% of the £1,088,000 exported from London in 1640. Based on figures from Fisher, 'London's Export Trade', p. 153; and TNA PRO E190/1136/8.

[125] Davis, *Rise of the Atlantic Economies.*

[126] See, for example: Stephens, *Seventeenth Century Exeter*; Ralph Davis, *The Trade and Shipping of Hull, 1500-1700* (Hull, 1964); G. Alan Metters (ed.), *The Kings Lynn Port Books, 1610-1614* (Norwich, 2009); R.W.K. Hinton (ed.), *The Port Books of Boston, 1601-1640* (Lincoln, 1956); Robert Titler, 'The Vitality of an Elizabethan Port: The Economy of Poole, c. 1550-1600', *Southern History*, VII (1985), pp. 95-118; Stephen Hipkin, 'The Maritime Economy of Rye, 1560-1640', *Southern History,* XX (1998-1999), pp. 108-142; W.B. Stephens, 'The Trade and Fortunes of Poole, Weymouth and Lyme Regis, 1600-1640', *Proceedings of the Dorset Natural History and Archaeological Society,* XCV (1974), pp. 71-73; and J.A.C. Whetter, 'Cornish Trade in the 17th Century and an Analysis of the Port Books', *Journal of the Royal Institution of Cornwall,* New ser., IV (1964), pp. 388-413.

Chapter 3:

Bristol's 'American Revolution', 1642-1665

After the prosperous years of the 1630s the world of Bristol's trade was to see dramatic changes over the next two decades. The outbreak of the Civil War in 1642 set in motion eighteen years of political, social, religious, and economic upheaval, only brought to a close by the restoration of Charles II in 1660. As a result of the chaos and administrative breakdown of these years, records of Bristol's trade during the Civil War and Interregnum are sparse. This is particularly true of the Port Books: apart from one coastal book from 1649, and a couple of fragmentary wine accounts from the same year, no useable Bristol customs records survive between 1638 and 1670.[1] Consequently, although events in the city during the Civil War itself have been well covered,[2] relatively little has been written about the evolution of Bristol's trade in these years. This is unfortunate, as in many ways this period is one of the most interesting in Bristol's commercial history, seeing the emergence of the American trades that were to transform Bristol's commercial world. This chapter aims to fill this gap in our knowledge, presenting the first detailed statistical survey of Bristol's overseas trade during the years after the Civil War, based on the previously much

[1] TNA PRO E190/1136/11 is an outwards coastal book from Lady Day until Christmas 1649. Interestingly it is on paper (rather than the usual parchment) perhaps representative of the disruption of these years. E122/221/75 is a Quarter Book for wine, with accounts covering December 1648 to March 1649, and June-July 1649. The Quarter Books were the original records which were later used by the customs officers to write up the fair copy Port Books. This is the only surviving example from Bristol in this period. Searchers Port Books do survive from 1661/2 and 1667/8 (TNA PRO E190/1240/6; E190/1137/1), however as the Searcher did not record the duty paid these are much more difficult to process than the Customer and Controller books. It may be possible to apply nominal values, as has been attempted with the Wharfage Books in this chapter, but as export cargoes were much more diverse than imports this would be a very time consuming task.

[2] See for example: P.V. McGrath, *Bristol and the Civil War*, (Bristol, 1981); J. Lynch, *For King & Parliament – Bristol and the Civil War*, (Stroud, 1999); D.H. Sacks, 'Bristol's 'Wars of Religion'', in R.C. Richardson (ed.) *Town and Countryside in the English Revolution*, (Manchester, 1992), pp. 100-129.

underused Wharfage Books of the Society of Merchant Venturers. The findings of this study are in many ways startling, showing that the American trades developed much earlier, and much faster than has previously been assumed.

The chapter will open with some notes on the nature of the Wharfage Books as a source, and an explanation of the methodology used to process them. The work of past historians on this period will then be outlined. T his will include both the previous accounts of the rise of Bristol's American trade, and studies of the economy of the nation as a whole during the Civil War and Interregnum. The analysis will first chart the rise of the American trades using the 1654/5 and 1659/60 Wharfage Books, examining the context in which this development occurred, and potential reasons for the rapid growth. This will extend to an examination of Bristol's engagement with the Americas in the years prior to the outbreak of war, as well as a consideration of the potential impact of the Civil War itself on Bristol's trade. Finally the 1664/5 Wharfage Book will be analysed to chart the continued development of Bristol's American trades in the years after the Restoration. Throughout this chapter the focus will principally fall on the development of Bristol's transatlantic trades. The on-going fortunes of trade with the traditional markets in France, Ireland, and the Iberian Peninsula will be given more detailed consideration in Chapter 5.

Methodological Challenges

Using the Wharfage Books

Wharfage was a duty, first imposed in 1606, on all goods imported into Bristol. Officially the money was designated for the repair of Bristol's port facilities, but as early as 1610 the Society of Merchant Venturers was collecting it for its own use, and indeed as the century progressed it was to become one of its main sources of income.[3] The first surviving

[3] P.V.. McGrath, *The Merchant Venturers of Bristol: A History of the Society of Merchant Venturers of the City of Bristol from its origin to the present day*, (Bristol, 1975), pp. 71-2.

Wharfage Book, in which the Society recorded its receipts from wharfage, begins in May 1654, and provides us with a very detailed record of Bristol's trade. Indeed, as McGrath has noted, the Wharfage Books closely resemble the Port Books, but with the advantage that they survive in an unbroken series from 1654-1694.[4] They certainly record many of the same details as the Port Books; in addition to duty paid (at 8d per ton) these included the name of the ship, where it had come from, the type and volume of goods, and the name of the merchant importing them. Indeed Jonathan Harlow, has gone as far as suggesting that they were 'effectively duplicates of the Port Books', with both sets of records based on the same information, forming part of a continuous clearance process for the merchant.[5] Perhaps most crucially he has shown that 'a comparison with the Port Books for some arbitrarily selected cargoes shows the entries to be virtually identical in content and date' to those in the Wharfage Books.[6]

Harlow's high praise is perhaps a slight exaggeration of the merits of the Wharfage Books. Although they did contain far more detail than was necessary for wharfage purposes alone, the level of detail recorded declines slightly over time. The clerks were, for example, erratic as to whether they recorded the exact date of a shipment; indeed this is largely omitted in the 1659/60 account, which simply states the month at the top of the page. More importantly, the port of origin is omitted after 1661, and by the 1670s the layout of the accounts had changed dramatically, making it increasingly difficult to tell exactly which vessel a consignment had come from. Rather than 'duplicates' of the Port Books, it might be better to see the Wharfage Books as separate records, but based on a similar model. When the Society of Merchant Venturers was deciding in 1654 how to record its wharfage receipts, it is natural that they turned to the Port Books as an exemplar of what details to record and how they

[4] P.V. McGrath, *Records Relating to the Society of Merchant Venturers of the City of Bristol in the Seventeenth Century*, BRS volume XVII (1951), p. liii.
[5] J.A.S. Harlow, 'The Life and Times of Thomas Speed', *unpublished PhD thesis, University of the West of England*, (2008), pp. 172-3.
[6] Harlow, 'Life and Times', p. 173.

should be laid out. Over the years, however, the Wharfage Books developed independently from this model, gradually removing extraneous details from the recording process. Nonetheless, they remain an invaluable record of Bristol's trade, all the more useful for surviving in a continuous series for a period where the Port Books are scant or even non-existent.

In spite of their many merits, the Wharfage Books do have one significant disadvantage over the Port Books: the wharfage duty was based solely on the volume of the goods being imported, and thus they give no account of their monetary value. Although admittedly the Book of Rates based values used in the Port Books were not reflective of current retail prices, the assignation of a nominal value to the goods is very useful as it allows us to gain a complete picture of Bristol's trade, rather than having to compare each commodity individually. With the help of a computer it is, however, relatively easy to create a similar set of data out of the Wharfage Books. Replicating the job of a seventeenth-century customs officer, it is possible to take the volumetric record of commodities from the Wharfage Books and, using the Book of Rates, assign a nominal value to each consignment.

Despite the fact that they survive in a continuous run throughout this period, the amount of time it takes first to input and process a year's wharfage accounts means that it has not been possible to examine all six years of surviving accounts from the Interregnum. Instead two years' accounts were selected to give an impression of the state of trade at this time. Although in some respects a limited sample, this still represents a considerable advance on any previous statistical surveys of trade in this period. The first year chosen was 1654/5, the first from which a Wharfage Book survives, and so the earliest chance to see any lasting impact of the Civil War on Bristol's trade, and how the American trades had developed in the sixteen years of statistical darkness.[7] A second

[7] Unlike the Port Books which run from Christmas to Christmas, this Wharfage account only begins in May. In the interests of acquiring the earliest data possible it was, therefore, decided to

year's accounts were selected from five years after this in 1659/60, both to test the findings from 1654/5 and to show the state of Bristol's trade on the eve of the Restoration.[8] A third account from 1664/5 was also transcribed to trace the development of Bristol's trade in the years after the Restoration. However, as a result of the additional problems which result from the decline in level of data recorded in the post-1661 accounts, this will be treated separately at the end of the chapter.

There are a few difficulties in the process of turning the Wharfage Books into a useful dataset, perhaps the most common example of which is differences between the measures used in the Wharfage Books and the Book of Rates. In such cases it has usually proved possible to convert to the correct unit, but where this was not achievable, for example with non-specific measures such as 'chests' of sugar or 'baggs' of wool, the wharfage duty itself has been used to calculate the volume of goods. There are also a number of cases where the goods described in the Wharfage Book do not have a value listed in the Book of Rates. Even for a seventeenth-century customs officer this was not an uncommon situation; there are certainly examples in the Port Books of the customs officer having to invent a value for non-listed goods. Where possible, therefore, the rate used in previous Port Books has been adopted. Wool, for example, had ceased to pay duty by the Restoration, so the valuation in use in 1637/8 was adopted. Failing this the rate for a similar commodity was substituted; for example, the rate for aquavita was used for 'spirrits' which does not appear in the Book of Rates.[9] Where no solution has been possible, such as the entries of 'several goods' on pp. 17 and 62 of the 1659/60 account, the entries have been omitted rather than corrupt the results with a complete guess. Adopting the above methodology means that the figures cannot give a 100 per cent accurate

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take the accounts for the year running from May 1654 to May 1655. May was a relatively quiet time in Bristol's trading calendar, so this is unlikely to have had any significant impact on the data. There does not appear to be any particularly consistent internal logic to the period covered by each set of Wharfage accounts, with summaries occurring at different quarters, usually Christmas or in September.

[8] For 1659/60, the usual Christmas to Christmas year was adopted.

[9] See Appendix 3.1 for a full list of commodities occurring in the Wharfage Accounts, and the nominal valuations which have been ascribed to them.

set of data. On the other hand, however, the errors are likely to be confined to individual consignments, and particularly to obscure goods rather than the main staples of Bristol's trade. In consequence, the overall impact on the broad trends reflected is likely to be minimal. Cases in which it was not possible to assign a value in fact made up just 1.23 per cent of imports in 1654/5 (82 out of 6,666 tons) and 0.95 per cent in 1659/60 (55 out of 5,787 tons).[10]

Customs Rate Revisions

Using the Wharfage Book data is further complicated by changes to the Book of Rates which occurred during this period. The late sixteenth and early seventeenth centuries were an era of rapidly changing prices (with inflation resulting from the rapid flow of bullion from the Spanish New World), so in 1642 Parliament undertook a significant overhaul of the valuations contained in the Book of Rates, from which all poundage duty was calculated. Further revisions occurred throughout the Interregnum, with the final alterations coming in 1660.[11] In theory this should cause less problems for interpreting data from the Wharfage Books than it does for the Port Books. As all valuations have to be added during processing anyway, it would be possible to continue using the old Book of Rates throughout. This, however, would both lead to difficulties in comparing the data with that from the post-Restoration Port Books. It is also likely to misrepresent the relative importance of each commodity, since by the end of the period the prices would be more than a century old. The valuations in use in the earlier part of the century were originally set in 1558, with just a minor update occurring in 1604.

Major shifts in the price of important commodities during the Civil War and Interregnum complicate the situation further. In particular the prices of tobacco and sugar dropped significantly over the middle years of the seventeenth century, as increasingly efficient plantation production meant

[10] These figures were calculated using the Wharfage duty paid on those consignments.
[11] R. Davis, 'English Foreign Trade, 1660-1700', in W.E. Minchinton (ed.) *The Growth of English Overseas Trade in the 17th and 18th Centuries*, (London, 1969), p. 86.

that supply often exceeded demand resulting in significant price falls.[12] With the price of these commodities falling so rapidly, it is unlikely that the values set in the Book of Rates would keep up with the changes, and may therefore exaggerate the value of trade in these commodities. It was thus decided to adopt the final post-1660 form of the Book of Rates for both sets of Wharfage Book data processed here, rather than the earlier 1635 version, or that in force at the time. In addition to making comparison with datasets from the remainder of the century much easier, the use of sugar and tobacco prices from the end of the period will eliminate the potential impact of erroneously high prices for sugar and tobacco.[13] This may, therefore, mean that the value of the trade in the colonial staples is slightly underplayed at times, particularly earlier in the period; nevertheless it seems better to err on the side of caution.

In the case of tobacco in particular, there have been questions asked as to whether the tobacco valuation in the Book of Rates, even the later 1660 version, is so inaccurately high that it is rendered unusable. Ralph Davis, for example, commented that the customs valuation of 1s. 8d. the lb on colonial tobacco was 'absurd', as its first cost in the colonies was more in the region of 2d.[14] Customs valuations in the seventeenth century, however, were not based on first cost, instead being intended to reflect the value of the goods in the port. In a study of London's trade from slightly later in the seventeenth century, Zahedieh also adopted significantly lower values for tobacco of 6d. per lb for the period 1663/9, with an even lower value of 2.4d. the lb for 1686.[15] The earlier of these valuations is ultimately derived from the 'Book of Tables', a series of import statistics for the port of London compiled by the House of Lords from the customs records.[16] As Davis has shown, the valuations were

[12] N. Zahedieh, *The Capital and the Colonies: London and the Atlantic Economy, 1660-1700,* (Cambridge, 2010), pp. 208-9.
[13] For example, processing the 1654/5 account with the 1642 Book of Rates (which has the price for tobacco at 3s. 4d. the lb. rather than 1s 8d, and brown sugar at £10 the cwt rather than £1 10s.) comes up with a total value of trade of £638,000, rather than the more realistic £293,000 produced by the 1660 valuations. The balance of markets is also heavily affected, with West Indian trade making up 58 per cent, rather than 42 per cent.
[14] Davis, 'English Foreign Trade', p. 87.
[15] Zahedieh, *Capital and the Colonies*, p. 189.
[16] Davis, 'English Foreign Trade', p. 84.

only added to these statistics at a later date (probably 1678), and so in fact probably represent much later prices.[17] Coming from the 1697 Inspector General's Ledgers, the latter figure is even later in its origins, and indeed is probably based on the colonial rather than the home price.[18] These values again are likely to be too low, Davis indeed having suggested that the value of 6d. per lb was 'probably near the merchants' price for poorer qualities'.[19] Prices as low as 6d. can be found during the late seventeenth century, but there were in fact many different grades of tobacco with greatly varying prices. One price current from 1686, for example, lists thirteen different varieties, varying in price from 7¼d. to 3s. the pound.[20] Lower values for tobacco, therefore, both date from significantly later than the 1650s and relate to either the wholesale price for lower grades, or even the farm price. There is unfortunately no complete series of retail prices for tobacco from the seventeenth century, although Thorold Rogers has collected some examples from sources such as Pepys' diary and college accounts (see Table 5). These show the tobacco price to have been prone to fluctuation, but certainly significantly higher than the customs valuation, especially earlier in the period before prices fell in the 1670s. It seems, therefore, that the Book of Rates valuation for tobacco was not particularly out of line with the other values contained within the Book of Rates.

[17] Davis, 'English Foreign Trade', p. 85.
[18] Zahedieh, *Capital and the Colonies*, pp. 12-13.
[19] Davis, 'English Foreign Trade', p. 87.
[20] Zahedieh, *Capital and the Colonies*, p. 205.

Table 5 - Retail Price for Colonial Tobacco, 1633-1686 (per lb):[21]

Year	Retail Price	
	s.	d.
1633	12	3
1649	4	0
1655	8	0
1658	9	5
1662	8	0
1670	3	1.5
1674	2	6
1681	2	6
1684	1	8
1686	1	6

As Table 6 shows, there was no clear relationship between a commodity's valuation in the 1675 Book of Rates and its wholesale price, although the wholesale price was almost invariably considerably higher. At around a fifth of the wholesale price, the customs valuation for tobacco is in fact proportionately lower than that of many other commodities. The valuation for raisins of the sun, for example, was a third of their wholesale price, while ginger was valued at as much as nine-tenths of its price. It seems therefore that, for the early Wharfage Accounts at least, any fears that the Book of Rates valuation for tobacco is too high, and therefore will distort the statistics, are unfounded. By adopting valuations from a later Book of Rates, dating from after the significant fall in tobacco price which occurred during the 1660s, tobacco is in fact valued proportionately lower than other commodities. If anything, therefore, rather than being exaggerated, these statistics will underplay the significance of tobacco imports in relation to other branches of trade.

[21] J.E. Thorold Rogers, *A History of Agriculture and Prices in England, vol. V 1583-1702*, (Oxford, 1887), pp. 467-8. Rogers was careful to differentiate between colonial and the more expensive Spanish tobacco.

Table 6 - Comparison of Retail Prices and Book of Rates Valuations, 1653-62:[22]

Commodity	Quantity	Book of Rates Valuation (1675) (£)	Average Retail Price (1653-62) (£)	Retail price as percentage of BOR value
Ginger	lb	0.07	0.08	113
Hops	cwt	1.50	5.07	338
Iron (wrought)	cwt	0.80	2.10	263
Lead (wrought)	cwt	1.00	0.89	89
Raisins	lb	0.01	0.03	194
Sugar (brown, coarse)	lb	0.01	0.04	264
Tallow	cwt	0.83	1.30	156
Tobacco	lb	0.08	0.42	508

A final difficulty which must be addressed before examining the Wharfage Book figures is how they can be compared with statistics from before the Civil War. This is because the valuations in the Book of Rates had been increased significantly, so potentially a proportion of any increase witnessed could be a statistical illusion, rather than a genuine increase in trade. Appendix 3.2 is a comparison of import valuations in the 1635 Book of Rates and that from after 1660 (in this case a 1675 edition) for twenty of Bristol's most important imports during the Interregnum (accounting for 82 per cent of trade in 1654/5). This shows that the duties on many of the commodities had risen considerably, although the scale of this increase was far from uniform with some remaining unaltered. The average for the whole batch suggests an increase in the region 74 per cent; more akin to the 1558 revision than the fairly minor changes of 1604. As has already been discussed, a notable exception to this is the values for sugar and tobacco, which as they experienced significant price falls during the seventeenth century had their valuations reduced. Exclusion of these two commodities would suggest an increase more in the region of 92 per cent, the average of the changes to the other commodities valuations. For the sake of simplicity, therefore, doubling

[22] Based on analysis of: Rogers, *History of Agriculture and Prices vol. 5*; '1675 Book of Rates'. The values have been decimalised to aid comparison.

the value of any pre-1642 Port Book statistics should allow fairly accurate comparison with figures derived using the post-1660 Book of Rates.[23]

The National Context

Studies of trade and commerce in the Stuart kingdoms as a whole during the Civil War and Interregnum are relatively sparse. Most examinations of the seventeenth-century economy either terminate with the outbreak of Civil War in 1642, or commence at the Restoration in 1660.[24] Those with dates encompassing the disrupted years tend to describe developments over the period as a whole, without any specific examination of the Civil War and its aftermath. There have, however, been a few pieces of research which focus specifically on this period, and their conclusions will be outlined here to provide some context for trends observed at Bristol. On the whole these have tended to focus on the economic policies of the Commonwealth and Protectorate governments, concluding that in general they were actually remarkably similar to their predecessors with the days of a deliberate 'laisser-faire' attitude still lying in the future.[25] They do, however, provide some information about the general economic situation which was shaping policy making.

There can be no doubt that the years after the Civil War were a very difficult time for the economy in general, and overseas trade was no exception. Indeed, Cooper has described this period as 'probably the worst economic crisis of the century'.[26] He suggested that the effects of the war were multiplied by a series of bad harvests, resulting in rising food prices, reduced home demand for manufactures and depression in the cloth industry similar to that seen in the 1620s. For overseas trade, the situation was worsened by the effects of Royalist privateering, as well

[23] The nominal value for wine has also been increased from £9 per ton to £16 per ton to account for this inflation.
[24] For example: B.E. Supple, *Commercial Crisis and Change in England 1600-1642: A Study in the Instability of a Mercantile Economy*, (Cambridge, 1964); F.J. Fisher, 'London's Export Trade in the Early Seventeenth Century', *Economic History Review*, (1950); Davis, 'English Foreign Trade'.
[25] J. Cooper, 'Social and Economic Policies Under the Commonwealth', in G.E. Aylmer (ed.) *The Interregnum: The Quest for Settlement 1646-1660,* (London, 1972), pp. 121-142; G.D. Ramsay, 'Industrial Laisser-Faire and the Policy of Cromwell', in I. Roots (ed.) *Cromwell A Profile*, (London, 1973), pp. 136-159.
[26] Cooper, 'Social and Economic Policies', p. 123.

as French hostility. Contemporaries too recognised the seriousness of the crisis, with one commentator claiming that the export trade 'is not one fourth part of what it was ten years ago as will appear by the receipt of Customs'.[27] Ultimately however, in both administrative and economic terms 'the dislocation caused by the Civil Wars was for the most part local and momentary'.[28] Although the crisis was certainly severe, the majority of wartime problems peaked in 1649 and 1650 with the end of the conflict, leaving the country to begin to return to normal.[29]

The respite after the Civil War was, however, to be short-lived. Although it was waged for largely commercial reasons, the outbreak of the First Anglo-Dutch war in 1652 would again have proved a major hindrance to trade. By 1653 London claimed to be impoverished as a result of the disruption of trade, although Cooper has suggested that the customs figures in fact show the volume of trade to have remained the same.[30] The outports would also have been hit by the war, especially those on the east coast. Commerce with the Netherlands was obviously lost, as was that to the Baltic, and voyages to Hamburg, the Mediterranean and France through the English Channel were seriously disrupted.[31] Due to their Atlantic position, it was ports on the west coast, such as Bristol, which would have been least affected by war with the Dutch, and indeed may have felt some benefit from the conflict.

In terms of overseas trade, the most important change in the mid-seventeenth century was the growth of the trades in American tobacco and sugar. Unfortunately according to Cooper 'very little is known about the exact chronology of this [development]', although it is probable that 'most of it came after 1650, but it was already under way before'.[32] In general the impression is that the bulk of this expansion came later. In the case of Bristol, for example, although Cooper suggested that

[27] Cooper, 'Social and Economic Policies', p. 124.
[28] Ramsay, Industrial Laisser-Faire', p. 157.
[29] Cooper, 'Social and Economic Policies', p. 123.
[30] Cooper, 'Social and Economic Policies, p. 138.
[31] Cooper, 'Social and Economic Policies', pp. 138-9.
[32] Cooper, 'Social and Economic Policies', p. 124.

alongside London it would have been the main beneficiary of growing American commerce, 'if it ultimately provided new prosperity for Bristol, any such growth before 1650 must have been outweighed by the dislocation of its Irish trade'.[33] Although Bristol's Irish commerce was certainly significant by the late 1630s, this does not suggest that the growth of trade with the American colonies is seen as having been of any great magnitude by the end of the Civil War.

Ultimately, the Civil War and Interregnum is looked at as a period which was afflicted by severe economic crises, but with no lasting damage. In terms of administration too, the Interregnum did not usher in any major shifts in economic policy. Even though great claims have been made for the economic effects of the Civil War, in reality there was little conscious effort on the part of the authorities to regulate trade and industry, and what action they did take left few lasting impressions.[34] Indeed Wilson even suggests that 'most of the economic trends observable in the century after 1660 were a continuation of earlier ones'.[35]

Previous Approaches to Bristol's Trade

A number of historians have written about Bristol's trade in this period, although their descriptions of the state of overseas commerce have often been unspecific, and the statistical sources used to back them up limited. On the whole, the consensus appears to be that by the mid-1650s Bristol had recovered from the negative effects of the Civil War. With regard to the American trades, there is a general agreement that these were beginning to develop during the Interregnum years, but that it was not until the latter part of the century that they really took hold.

G.D. Ramsay suggested that 'by the middle of the century... prosperity at last returned to Bristol, and the promise inherent in the commercial

[33] Cooper, 'Social and Economic Policies', p. 124.
[34] C. Wilson, *England's Apprenticeship 1603-1763,* (London, 1984), pp. 134-8.
[35] Wilson, *England's Apprenticeship*, p. 138

departures of the thirties was fulfilled'.[36] However, although the growth of American trade was of crucial importance to his account of 'the rise of the western ports', he provided relatively little detail about its early development at Bristol. The only evidence he presented of the growth of American commerce was the establishment of a second sugar refinery in the city by John Knight in 1654, certainly evidence of Bristol's growing connections with the West Indies but hardly a firm quantitative source.[37] For Ramsay, however, it was not until after the Restoration in 1660 that 'the great age of the city began anew' and Bristol 'found a place as a major emporium of Atlantic trade'.[38]

D.H. Sacks was also clearly aware of the growing importance of American trade to Bristol from the 1650s onward. Unfortunately however, unlike his comparatively detailed studies of trade from the late fifteenth to early seventeenth centuries, his description of this growth is confined to just a few sentences:

> 'At first this new trade, profitable though it could be, was conducted on a very small scale. But by the 1650s it had grown considerably in volume. Now ships were returning to Bristol from the Chesapeake and the West Indies by the dozen, not just in twos and threes'. [39]

Changes to the scale and nature of Bristol's trade were, however, no longer Sacks' main focus, and he gave no further figures or evidence to substantiate this reported expansion. Instead his interest lay in the implications of this new trade for the fabric of Bristol's society, and his quantitative analysis was confined to using the city's *Register of Servant's to Foreign Plantations,* and at times the Wharfage Books, to count and characterise those engaged in Bristol's colonial trades. Sacks' work in this regard further hints at the growing significance of Bristol's American trades, without putting a figure on how important they had become.

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[36] G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence*, (London, 1957), p. 144.
[37] Ramsay, *English Overseas Trade*, pp. 144-6.
[38] Ramsay, *English Overseas Trade*, p. 146.
[39] D.H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy 1450-1700,* (Berkeley, 1991), p. 251.

Indeed, he suggested that the impact of the opening up of Atlantic commerce was more than just a change in the nature of trade itself, representing a 'change in the nature of the trading community that conducted it and in the political economy governing the city's life'.[40] Sacks concluded that, with their lack of regulation and relatively simple nature (involving just two staple imports and an almost unquenchable demand for all variety of exports), these new trades allowed all manner of small traders and non-specialist merchants to dabble in overseas ventures.[41] From the Wharfage Books, he identified 423 people importing sugar and tobacco between 1654-6, of whom 30 were women, only 26 per cent were merchants; the rest represented a broad spectrum of crafts.[42] Many of Sacks interpretations of the impact of these developments on Bristol's social order have more recently been called into question.[43] Nonetheless, that he believed that the impact of the emergence of the American trades was sufficient to pose a threat to the established merchant elites certainly hints at its significance.

The only historian who has attempted to quantify the rise of Bristol's American trades was Patrick McGrath. McGrath was also rather more thorough in his consideration of the impact of the Civil War on Bristol's trade, although he recognised that 'the absence of Port Books for this period makes it difficult to say how serious the setback was and how long it lasted'.[44] He suggested that 'the Civil War and its aftermath were bad for Bristol's trade', with two sieges; the disruption of commerce and industry in its hinterland; the risk of ships being seized, the troubles in Ireland; and wars with the Netherlands, Portugal, and Spain all taking their toll.[45] Like Ramsay, however, he concluded that by the mid-1650s 'there are indications that trade was again prospering'.[46] An important part of this renewed success was the exploitation of opportunities in the

[40] Sacks, *Widening Gate*, p. 251.
[41] Sacks, *Widening Gate*, pp. 263-4.
[42] Sacks, *Widening Gate*, p. 259.
[43] Harlow, 'Life and Times', pp. 80-5.
[44] P.V. McGrath, *Merchants and Merchandise in Seventeenth-Century Bristol*, Bristol Record Society, vol. XIX (Bristol, 1968), p. xx.
[45] McGrath, *Merchants and Merchandise*, pp. xx-xxi.
[46] McGrath, *Merchants and Merchandise, p. xxi.*

West Indies and America, and he attempted to chart the rise of these trades by counting the number of ships clearing the port. This survey suggested that colonial commerce grew steadily over the second half of the century; his figures show American and West Indian shipping to have made up around a seventh of the total between 1658 and 1660 rising to a sixth in 1667-8 and between a third and a quarter in the period 1685-7.[47] McGrath, though, recognized that, due to the comparative size of the ships involved in these trades, and the value of the commodities they carried, the true significance of these trades may have been greater than his figures suggested.

Overall, although some historians have discussed the rise of Bristol's American trades and the implications of this, their accounts are lacking in detail. In particular there is a lack of statistical evidence illustrating the extent of growth in these trades, and the pace at which it occurred. This chapter aims to address this imbalance, employing the relatively unused Merchant Venturers Wharfage Books to fill this hole in current knowledge. A detailed statistical investigation of these sources will both explore the growing American trades, and the broader trading context into which they fitted.

Bristol's 'American Revolution'

Even accounting for potential flaws in the data provided by the Wharfage Books, the picture they present is certainly startling, and marks a considerable contrast to previous interpretations of the early years of Bristol's American trades. As Figure 36 shows, Bristol's imports had clearly grown considerably in value in the sixteen years between 1637/8 and 1654/5. Even when the pre-Civil War total is doubled to take into account changes in the customs rates, it is clear that the £293,000 worth of goods imported into Bristol in 1654/5 represented a greatly expanded trade. Indeed, it appears that the city's trade had grown by as much as 80 per cent in less than two decades, continuing and even exceeding the

[47] McGrath, *Merchants and Merchandise*, p. xxi.

development seen in the first forty years of the seventeenth century. At £238,000, imports in 1659/60 were slightly down on those five years earlier. This may suggest that 1654/5 was an unusually prosperous year for Bristol's trade, or perhaps just reflects normal year to year fluctuations. The decline may also be a result of changes in trading conditions, for example England's war with Spain between 1656 and 1658 is likely to have impacted negatively on Bristol's trade. Indeed, Bristol's Spanish imports in 1659/60 were half those in 1654/5, and imports from the West Indies (one of the main theatres of the conflict) had declined by more than two thirds (see Figure 38). It is, however, still clear that Bristol's imports had expanded significantly since the 1630s, the 1659/60 figure still reflecting a growth in excess of 40 per cent over that from 1637/8.

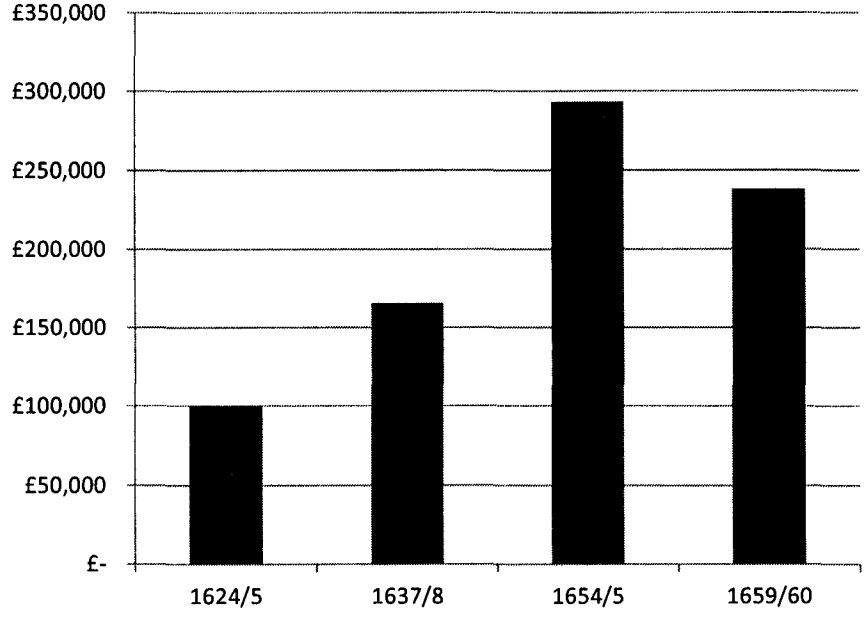

Figure 36 - Bristol's Imports as Recorded in the Port Books and Wharfage Books, 1624/5-1659/60:[48]

Using data from just two years is perhaps not an ideal way to study Bristol's trade in general, as any number of factors may have resulted in trade being particularly prosperous or depressed during the selected

[48] TNA PRO E190/1135/6; E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.3.1. The values for 1624/5 and 1637/8 have been doubled to account for the changes in customs rates. The 1654/5 and 1659/60 values were calculated using the '1675 Book of Rates'.

years. Although the amount of time it takes to transcribe a complete account has precluded carrying out full transcriptions of Wharfage accounts from further years, to provide a more continuous set of data, the total Wharfage duty collected has been used to calculate the volume of Bristol's imports in each year. In many respects this is not an ideal measure of trade, as the value of goods varied greatly in relation to their bulk. In particular, much of the traffic at Bristol was made up of ships participating in Irish commerce, which carried high volumes of low value goods. Nonetheless, they can provide a valuable check as to whether trade in any particular year was typical of those around it. The first year which was examined in detail does appear to have seen a particularly high volume of goods come into Bristol (see Figure 37). The Wharfage Books show almost 2,900 tons of imports in 1655, compared to less than 2,000 in each of the following years. The second year, 1659/60, on the other hand, does seem to have been fairly typical in terms of total tonnage. The 2,450 tons of goods imported in 1660 was slightly up from 2,200 the year before, but less than the 2,750 and 3,100 tons of goods imported in the succeeding years. Overall therefore, although there were significant year to year fluctuations, the 1654/5 and 1659/60 Wharfage accounts should give a fairly representative impression of Bristol's trade in the 1650s.

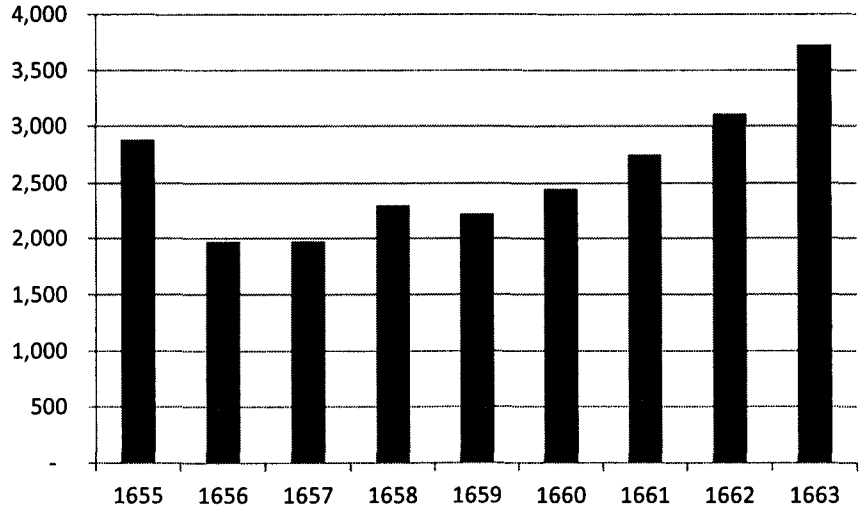

Figure 37 - Bristol's Imports as Recorded in the Wharfage Books, 1655-1663 (tons):[49]

The improvement in Bristol's imports is all the more remarkable, bearing in mind that it coincides so closely with the time of seven years of Civil War which enveloped the three kingdoms of the Stuart monarchy. The first Wharfage Account in 1654/5 falls just five years after the end of the conflict, from which previous historians have suggested that Bristol suffered greatly as a result of damage to both merchant capital, and general wealth, and to the country's infrastructure.[50] Both Ramsay and McGrath suggested that Bristol had largely recovered by the mid-1650s. These figures, however, go even further showing that Bristol's trade had continued to expand and even accelerate its growth in spite of all the disruption.

[49] I am deeply grateful to Jonathan Harlow for providing me with totals of the Wharfage collected, which were used to calculate the tonnage figures presented in this graph. Wharfage was paid at a rate of 8d. per ton. BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.3.2.
[50] Ramsay, *English Overseas Trade*, p. 144; McGrath, *Merchants and Merchandise*, p. xix.

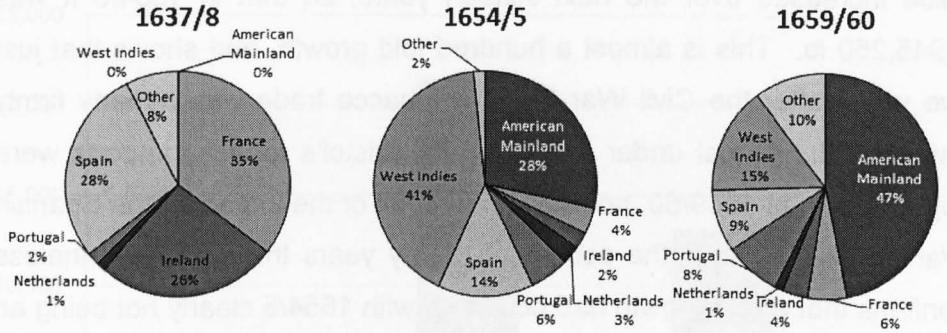

Figure 38 – Bristol's Imports by Country of Origin: 1637/8-1659/60(in pounds sterling):[51]

Easily the most striking feature of the data from the 1654/5 Wharfage Book is the rise of the American trades. As Figure 38 shows, these had barely featured prior to the Civil War, with just £60 worth of goods recorded as coming in from the colonies in 1637/8, but by 1654/5 they were dominant. Between them, the West Indies and Mainland colonies accounted for almost 70 per cent of Bristol's imports in 1654/5, already having achieved the dominance which was to characterise the port's trade in the years after the Restoration. Although the 1659/60 account shows the West Indian trades considerably down, imports from the American Mainland had increased slightly to compensate, meaning that between them the colonial trades still made up more than 62 per cent of Bristol's imports. The pace of expansion shown by these figures was much more rapid than previous estimates of the development of Bristol's American commerce. Indeed, this share of around 70 per cent of Bristol's imports in the mid-1650s is far greater than the seventh (about 14 per cent) which McGrath suggested that American and West Indian commerce contributed to Bristol's trade at this time. Indeed it is well in excess of the figure of about a third of Bristol's trade which his data indicated they had reached by the 1680s.[52]

The rise of Bristol's American trades can also be seen in volumetric measures of the commodities imported (see Figure 39 and Figure 40). From just 5,150 lb in 1624/5 and 20,000 lb in 1637/8, Bristol's tobacco

[51] TNA PRO E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.4.1. The 1654/5 and 1659/60 values were calculated using the '1675 Book of Rates'.
[52] McGrath, *Merchants and Merchandise*, p. xxi.

trade increased over the next sixteen years, so that in 1654/5 it was 1,945,250 lb. This is almost a hundred fold growth, and shows that just five years after the Civil War Bristol's tobacco trade was already firmly established. At just under 1,500,000 lb, Bristol's tobacco imports were slightly down in 1659/60, possibly as a result of the impact of the Spanish War. However, over the course of twenty years the data nevertheless confirms that a real growth had occurred, with 1654/5 clearly not being an exceptional year.

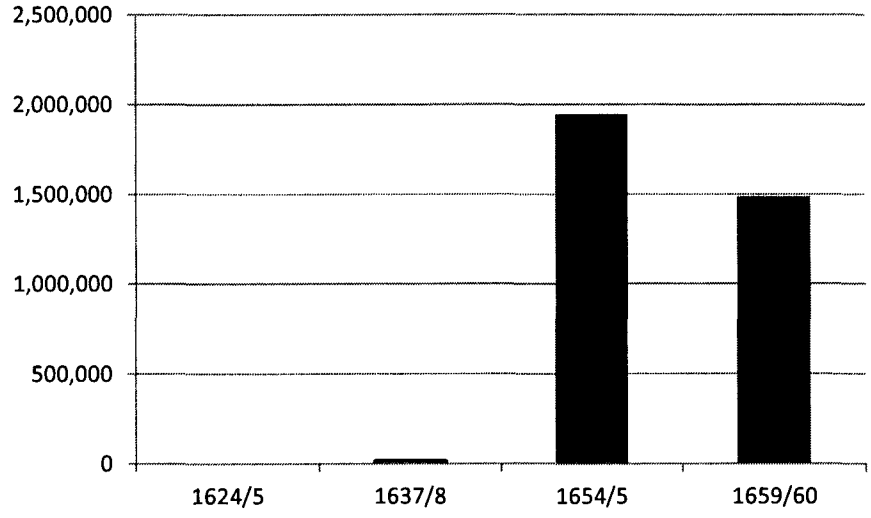

Figure 39 - Bristol's Tobacco Imports (lb) 1624/5-1659/60:[53]

A similar story to the rapid growth of the tobacco trade is told by Bristol's sugar imports. Although Bristol was already importing sizeable quantities of sugar from Spain, none was imported from the American colonies in 1637/8. In 1654/5, however, Bristol imported as much as 21,400 cwt from the West Indies and American mainland. As with tobacco, these were notably down at 13,200 cwt in 1659/60. Again this may reflect year to year fluctuations, or a change in the trading conditions, it is certainly possible that war with Spain had led to disruption in the sugar producing West Indies. Nonetheless there can be little doubt that overall Bristol's sugar imports had undergone a very noteworthy expansion.

[53] TNA PRO E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.4.2. For notes on how the figures were converted into lb. see Appendix 2.2 and Appendix 3.1.

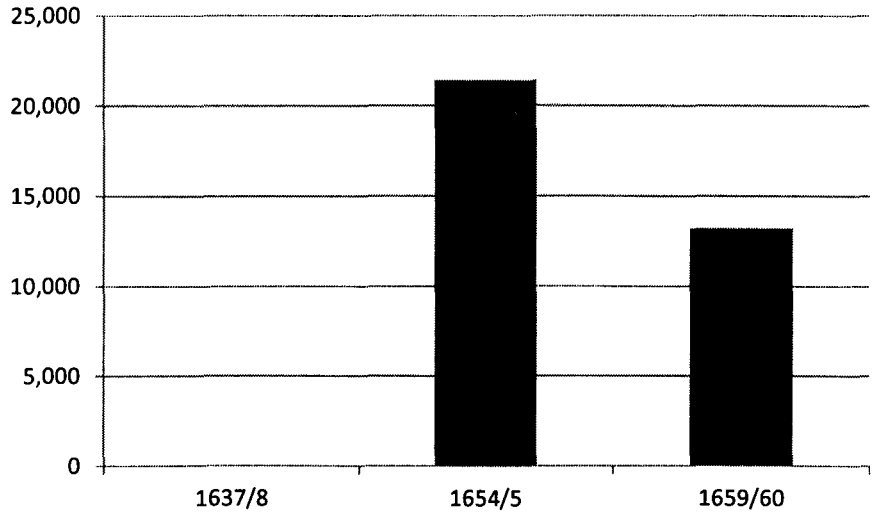

Figure 40 – Bristol's American Sugar Imports (cwt) 1637/8-1659/60:[54]

As was the case with London's American Imports, the two colonial staples tobacco and sugar together dominated Bristol's imports from the colonies (see Figure 41).[55] Between them they made up 92 per cent of Bristol's imports in 1654/5, and were even more dominant in 1659/60. The remainder of the trade was made up by an assortment of other goods. Ships from Virginia carried almost exclusively tobacco, but those originating in the West Indies had more mixed cargoes also including sugar, as well as small quantities of other cash crops such as ginger and the dyestuff indigo.

[54] TNA PRO E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.4.2. For notes on how the figures were converted into Cwt. see Appendix 2.2 and Appendix 3.1.
[55] Zahedieh, *Capital and the Colonies*, ch. 5.

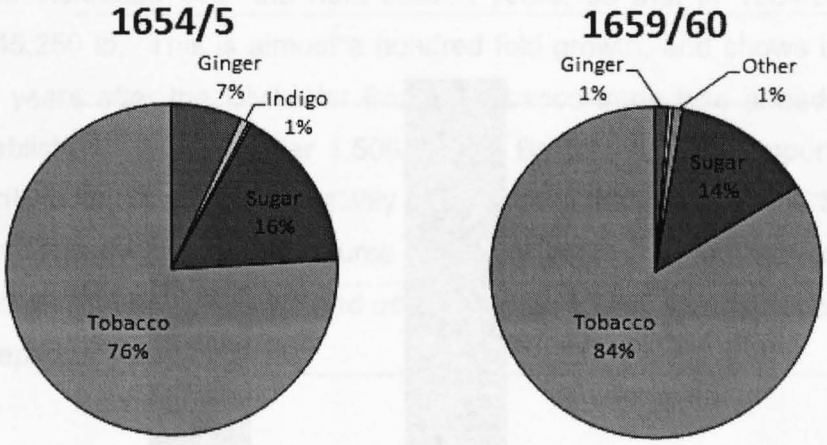

Figure 41 - Bristol's American Imports by Commodity 1654/5 and 1659/60 (in pounds sterling):[56]

The Wharfage Books certainly show the pace and scale of the development of Bristol's American trades to have been remarkable, but this still leaves questions as to exactly when it began, and what caused it to occur. A number of factors appear to have combined to lead to this sudden expansion of Bristol's American and West Indian trades. The most obvious is that this was simply the time when the American colonies became firmly established, and saw their populations undergo a significant expansion. The population of Virginia, for example, following the first establishment of a colony in 1607, grew from 1,200 in 1624/5 to 8,000 in 1640.[57] The need to supply this new colonial population has long been recognised as an important driving force in the growth of English transatlantic trade.[58] Naturally the newly founded colonies lacked any substantial manufacturing industries so they were reliant on English ships for all manner of manufactured wares. Also, even relatively early on, the colonies became almost entirely focused on the production of their staple cash crops, devoting little space or effort to the production of foodstuffs, thus creating a considerable market for the export of provisions from England and Ireland.[59]

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[56] BRO SMV/7/1/1/1; SMV7/1/1/2. See Appendix 3.4.3. All goods valued according to the '1675 Book of Rates'.
[57] R. Davis, *The Rise of the Atlantic Economies*, (London, 1973), pp. 126-7.
[58] Davis, 'English Foreign Trade', pp. 80, 83.
[59] R. Brenner, *Merchants and Revolution: Commercial Change, Political Conflict, and London's Overseas Traders, 1550-1653*, (London, 2003), p. 95.

Perhaps as important as the new market provided by the colonial population, however, is the massive new demand which was created in England for New World goods.[60] As has already been mentioned, the substantial new source of supply for both tobacco and sugar led to significant falls in their prices over the course of the mid-seventeenth century, turning them from luxury goods into an increasingly regular part of life for people at all levels of society. Recorded imports of tobacco, for example, increased from 100,000 lb per annum in 1611 to as much as 8 million lb in the 1660s, bringing average per-capita consumption up to as much as 300 pipefuls a year.[61] Both the leaf's addictive qualities and the rapid fall in prices meant that it became an increasingly ubiquitous feature of urban life, featuring regularly in qualitative sources such as Pepys' diary.[62] Sugar growing was only introduced to the West Indian colonies on a significant scale in the 1640s, but it too enjoyed a rapid rise in consumption as its price fell. From having been an expensive luxury at the start of the century, it became increasingly apparent in recipes from all levels of society, being used for decoration, as a preservative, and even to help make food which was almost rotten palatable.[63]

Earlier Involvement in American Trade

If increased population was the sole factor in driving the rise of Bristol's American trade some involvement prior to the Civil War would be expected. It is certainly true that many London merchants had already made their fortunes in the colonial trades before the conflict broke out.[64] Bristolians were involved in a number of American projects in the early seventeenth century, although, as McGrath has pointed out, their involvement tended to be relatively modest and often the work of only a few men.[65] Other than the regular Newfoundland fishing voyages, the

[60] Davis, 'English Foreign Trade', pp. 80-1.
[61] Zahedieh, *The Capital and the Colonies*, pp. 206-7.
[62] Zahedieh, *The Capital and the Colonies*, p. 207.
[63] Zahedieh, *The Capital and the Colonies*, pp. 221-226.
[64] Brenner, *Merchants and Revolution*, ch. IV.
[65] P.V. McGrath, 'Bristol and America, 1480-1631', in K.R. Andrews et.al. (eds.), *The Westward Enterprise: English Activities in Ireland, the Atlantic and America 1480-1650*, (Liverpool, 1978), pp. 96-102.

only significant trace these activities have left on the Port Book records is £1,168 of imports from New England and Somers Island in 1624/5. This made up less than 2.5 per cent of Bristol's imports in that year, and indeed even this figure is likely to be an exaggeration, as tobacco paid a disproportionately high rate of poundage in relation to other commodities. Indeed, closer inspection shows this new trade to in fact have been made up of just two consignments on one ship, totalling little more than 5,000 lb of tobacco. Even this exceptional interest seems to have been short-lived, as the 1637/8 Port Book shows just £60 worth of goods imported from the American Colonies.

One possible explanation for Bristol merchant's lack of involvement in the American trades before the Civil War is simply that they were not interested. Bearing in mind the rapid expansion of Bristol's traditional trades in the 1620s and 30s they would perhaps have had little need or incentive to speculate on risky new ventures in the Americas. McGrath repeatedly stressed the meagre profits and erratic success of projects which Bristol men had been involved in. It is not surprising, therefore, that they showed little enthusiasm for further colonial ventures.[66] On the whole it would be wrong to say that Bristol showed no enthusiasm for colonising the Americas, although their efforts tended to fall on the shores of Newfoundland rather than further south. In many ways a more northerly colony suited Bristol, as dried fish from the Newfoundland Banks would have made a very useful supplement to its existing Iberian trades. Although, as ever, a little unwilling to pay their full share, Bristol merchants made up almost a third of the membership of the joint London and Bristol company which settled a colony at Cupers Cove in 1610 (just three years after the Virginia colony which represented the first English settlement in America).[67] Even after the breakup of this company, and without the involvement of the leading figure of the first venture John Guy, Bristol merchants were still keen to pursue Newfoundland colonisation,

[66] McGrath, 'Bristol and America', p. 102
[67] A.F. Williams; G.W. Handcock and C.W. Sanger (eds.), *John Guy of Bristol and Newfoundland*, (St. Johns, 2010), ch. 3.

attempting to establish another colony 'Bristol's Hope' in 1617.[68] These ventures, however, failed to deliver either the quick profits or return on their investment for which Bristol's merchants would have hoped. It is perhaps not surprising, therefore, that they showed less enthusiasm for colonising projects in the 1620s and 30s. It must, after all, be remembered that merchants in the early seventeenth century lacked the benefit of hindsight, and can have had no idea of how the trades in American sugar and tobacco were set to spectacularly take-off.

To an extent the nature of trade with the tobacco growing colonies may have provided a further barrier to Bristol involvement in American commerce prior to the Civil War. Brenner has suggested that in the years after the dissolution of the Virginia Company in 1625 'those interested in marketing large amounts of tobacco could not easily obtain it without taking part in the production process'.[69] As the colonial economies were still relatively undeveloped, they were still reliant on regular outside injections of capital and manpower to survive. A system, therefore, developed of merchant-planter partnerships where the merchant would supply set-up capital and on-going loans to the planter in return for their tobacco crop.[70] Brenner has shown that, as a result of this need to make an on-going investment in colonising projects, many of London's company merchants were unwilling to be involved in trade with the colonies. In their monopoly protected trades they had much more promising and less risky investment opportunities open to them, therefore it was a new group of merchants from less impressive socio-economic backgrounds who were prepared to take the risks, and ultimately profited from the early American trades.[71] The same could perhaps be said of Bristol's established merchants; with their existing trades with Ireland, Spain, and France prospering they would have had no need to speculate on these risky and costly ventures in the American colonies.

[68] Williams, *John Guy*, pp. 148-153.
[69] Brenner, *Merchants and Revolution*, p. 103.
[70] Brenner, *Merchants and Revolution*, pp. 103-4.
[71] Brenner, *Merchants and Revolution*, pp. 111-12.

Possibly the most significant factor in Bristol's lack of connections with the new colonies, however, was legislation which formally barred Bristol merchants from becoming involved in the new American trades. The first of these was a monopoly on all tobacco imports which was held by the Virginia Company from its inception in 1619 until 1625 when it was disbanded.[72] Although this did not completely bar Bristol merchants from trade with the American colonies, excluding them from its staple commodity would have been a major, and indeed probably insurmountable, disincentive. The tobacco imports appearing in the 1624/5 Port Book may, therefore, represent a first experiment into this trade by Bristol merchants as the possibility became available to them.

The window of opportunity which opened up in 1625 was, however, to prove short-lived. Just six years later a further piece of legislation was introduced, again barring Bristol merchants from the tobacco import business. This time it came in the form of a Royal Proclamation, issued in January 1631, which forbade the import of tobacco into any port other than London.[73] This proclamation was re-issued twice, firstly in May 1634 and then again in January 1638, and, like the monopoly before it, would have been a major hindrance to any Bristol desires to develop connections with the Americas. It was, however, withdrawn in January 1639, interestingly as a result of a petition from the farmers of the Customs who felt that they were losing out greatly on customs duties as a result of tobacco being smuggled into western ports.[74]

There are a few pieces of evidence for illicit tobacco trade through Bristol in the late 1630s. One case involving two merchants described as 'patentees of London' occurred on the 14th of December 1638, little more than a month before the prohibition was lifted. Most unusually for a smuggled consignment, these imports are actually recorded in the Port Book. The details are not specific, with no duty paid and two of the three

[72] A.M. Millard, 'The Import Trade of London', *Unpublished PhD Thesis* (University of London, 1956), pp. 303, 305.
[73] J. Latimer, *The Annals of Bristol in the Seventeenth Century*, (Bristol, 1900), p. 116.
[74] Latimer, *Annals*, p. 144.

entries were recorded as unknown quantities, but the customs officer notes that they were 'resting in ye warehouse' and adds a note: 'that these former parcels of Tobacco landed without lawfull order and much more is ommited in thy account; in regard whereof I stand not chargable in thi[s] account'.[75] Further evidence, this time concerning Bristol merchants, comes from a 1641 court case relating to the allegations of a Bristol Customs Waiter.[76] Depositions were given stating that a licence had been granted to land a cargo of tobacco from St. Kitts in November 1637, and again in January 1638 for 90 cwt from Barbados. The Waiter also suggested that further large quantities of tobacco had been brought into the Avon and landed from there, but that he had been thwarted in his attempts to seize the contraband.

The implication, therefore, is that Bristol's American trade prior to the Civil War may not have been quite as small as the surviving Port Books suggest. In addition to the lifting of the monopoly, Bristol's merchants may also have been encouraged in this trade by the increased availability of tobacco in the colonies. Rather than being completely tied to their merchant backers, as in the early stages of colonisation, Davis has suggested that as cash crops became established there were increasing opportunities for casual traders, who bought the planters' crops on the spot rather than in a prearranged deal.[77] This would have made it increasingly easy for Bristol's merchants to deal in colonial goods without the need to take the risks and heavy investment needed to be directly involved in colonisation. Although unfortunately its initially illicit nature, and the lack of any surviving records for the period after the lifting of the monopoly mean it is not possible to assess the scale of this involvement, there can be no doubt that in the late 1630s and early 1640s Bristol merchants were showing some interest in the new opportunities which the American colonies presented to them. On the other hand it seems highly unlikely that it was on anything like the scale seen in the first

[75] TNA PRO E190/1136/10, f.29v.
[76] Latimer, *Annals*, pp. 152-3.
[77] R. Davis, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth* Centuries, (Newton Abbot, 1872), p. 270.

Wharfage Books, it simply would not have been possible to conceal a trade on that scale. Nevertheless, this initial involvement may help to explain how Bristol was able to develop its American connections so rapidly after the Civil War.

The Impact of the Civil War

With such a significant event as the Civil War occurring in close proximity to the spectacular rise of Bristol's American trades, it is reasonable to ask the question of whether its disruption of the existing social and economic situation may, to an extent, have provided a catalyst to these developments. Although surviving evidence is scant, there can be little doubt that on the whole the Civil War was very disruptive for Bristol's trade. Bristol was besieged twice in the course of the war, bringing with it inevitable dislocation, as well as leading to political confusion as the city switched between neutral, Parliamentarian, and Royalist command. Perhaps more significant, however, was the disruption which the war would have brought to Bristol's hinterland, bringing both reduced demand for imported goods as a result of economic insecurity, and difficulties in distribution and sourcing of export goods. Irish trade in particular would have been badly affected, as Ireland was one of the bloodiest theatres of the Civil War. A further complication came in the form of naval activities and privateering, which certainly posed a great threat to Bristol's shipping throughout the conflict. Many Bristol ships, for example, were pressed into service in the Royalist Navy, or had their guns commandeered to man the city's defences.[78] There are also examples of Bristol ships being seized or even pressed into service by Parliament, and increased piracy as a result of the breakdown of authority posed a further threat to shipping.[79]

As well as the inevitable difficulties, there may also have been some benefits to Bristol from the war. There was a profit to be made in

[78] J. Lynch, 'Bristol Shipping and Royalist Naval Power during the English Civil War', *The Mariner's Mirror*, vol. 84 No. 3 (1998), pp. 261-3.
[79] McGrath, 'Merchant Shipping in the Seventeenth Century: The Evidence of the Bristol Deposition Books – part II', *Mariners Mirror*, XLI (1955), pp. 34-6.

increased trade of arms and armaments, as well as in supplying provisions to the respective armies. Perhaps more significant, however, is Charles' attempts to encourage trade through Bristol during the phase of Royalist occupation, in an attempt to set up a Royalist trading centre in place of the Parliament's London. Most notably this resulted in a new charter for the Society of Merchant Venturers, granting them considerable privileges at the expense of many London monopoly companies.[80] A fuller investigation may be able to fill in more detail on how Bristol's trade was affected by the Civil War, but the lack of any surviving statistical data means that it will probably never be possible to do more than estimate the scale of disruption. On the whole, however, there can be little doubt that, although it never brought trade to a halt, the Civil War was hugely disruptive for Bristol. On the other hand, as the 1654/5 Wharfage Book has shown, this dislocation was relatively short-lived, with Bristol having returned to prosperity and even seeing a significant growth in its trade just five years after the end of the conflict.

The lack of any surviving evidence means that it is very difficult to trace the continued development of the American trades through the Civil War years. There is, however, one qualitative source which does provide us with some fragments of evidence for the day to day business of Bristol's trade, and on the whole this would suggest that voyages to and from the American colonies were becoming increasingly common. This comes in the form of the first volume of the Bristol Deposition Books, covering the period 1643-1647.[81] Depositions were sworn statements of events made by individuals in front of a magistrate in case they were later needed in legal proceedings.[82] These depositions, of course, relate to all aspects of life rather than just trade, and their episodic nature makes it impossible to subject them to statistical analysis. Nonetheless, they do contain a number of gems of information on Bristol's trade during the war years.

[80] McGrath, *Merchant Venturers*, pp. 56-7.
[81] H.E. Nott (ed.), *The Deposition Books of Bristol vol. I 1643-1647*, Bristol Record Society vol. VI (1935).
[82] P. McGrath, 'Merchant Shipping in the Seventeenth Century: The Evidence of the Bristol Deposition Books – part I', *Mariners Mirror*, XL (1954), p. 282.

Although not specifically examining the rise of American commerce, McGrath's survey of the evidence the Deposition Books concerning merchant shipping in the seventeenth century does bring to light a number of examples of ships making transatlantic voyages in the 1640s.

The earliest deposition refers to a voyage which had occurred in 1638, initially heading to Newfoundland and then on to Virginia.[83] Another example, this time from 1645, refers to a ship which came into Chepstow from Barbados, where the governor took four rolls of tobacco from the ship.[84] Two further examples come from 1646. One refers to various hogsheads of tobacco brought home by the merchant Thomas Weston, on which £60 of customs were due.[85] The other refers to rows between the master and crew on a Dutch ship, the *Bordeaux* of Flushing, which was on a voyage from the West Indies to Ireland.[86] A final example comes from 1649, where a widow refers to her husband's share in an 80 ton ship, the *Richard and Francis*, which had sailed to Barbados.[87] Unfortunately these depositions can never be more than fragmentary glances, and we can glean little from them about the extent to which Bristol's involvement with the Americas had grown. They do, however, show that Bristol's involvement in American commerce had certainly continued in spite of the difficulties of the Civil War. As those voyages which happen to have been recorded in depositions almost certainly do not represent the entirety of Bristol's transatlantic voyages in these years, it may well be the case that the trade had continued to expand.

The Anglo-Dutch War

Following on rapidly from the end of the Civil War in 1649, the First Anglo-Dutch War (from 1652 to 1654) may have contributed to the rapid expansion of Bristol's American commerce. Much of the naval strife, with resulting hazards to merchant shipping, was focused on the English

[83] McGrath, 'Merchant Shipping part II', p. 28.
[84] McGrath, 'Merchant Shipping part I', p. 292.
[85] McGrath, 'Merchant Shipping part I', p. 292.
[86] McGrath, 'Merchant Shipping part II', p. 23.
[87] McGrath, 'Merchant Shipping part I', p. 286.

Channel, providing a major obstruction to routes into London.[88] Bristol, on the other hand, with its position on the West Coast had an almost clear run to open water and the Americas, so must have seemed something of a safe haven. This situation may well have accelerated Bristol's process of becoming involved in the American trades, but it was clearly no short term boost. Although slightly down on those of 1654/5, the figures from 1659/60, more than five years after the end of the war, show Bristol's trade still far in advance of its pre-Civil War position, and American trade taking a significant share.

Another possibility is that, rather than an increase in 'Bristol's' trade, these figures may simply represent London merchants trading through Bristol to exploit its convenient position on England's Atlantic coast. Comparison of the data from the Wharfage Books with a membership list for Bristol's Society of Merchant Venturers, however, would suggest that this was not the case.[89] Over the course of the first six months from which the Wharfage Books survive (April to September 1654) 51 per cent of the value of Bristol's imports was conducted by individuals who can be identified as members of the society, and therefore clearly Bristol merchants. Although this is not as high as the 81 per cent share held by Merchant Venturers in 1637/8, it is still a significant proportion of the trade and certainly suggests that much of the impetus came from within Bristol's merchant community rather than from outsiders.[90] It must also be borne in mind that this percentage is far from representing the entire Bristol involvement. Many names, for example, are recognisable as

[88] C. Wilson, *Profit and Power – A Study of England and the Dutch Wars*, (London, 1957), p. 62.
[89] Based on a comparison of: BRO SMV/7/1/1/1; and McGrath, *Records*, pp. 26-33, 261. The names recorded in the Wharfage Books for those responsible for importing a particular consignment were added to the database for these months, and compared to both the contemporary list of members of the Society reproduced by McGrath, and his appendix of other members who appear in the Hall Book, but were omitted from the list. There is some difficulty in establishing whether merchants were still either alive or active at this point, as the list begins in 1618, so such entries were assumed to be the merchant listed unless evidence to the contrary was known. Those who joined the society after 1654/5 were also included, as the aim of this exercise was to establish the Bristol share of trade, not the influence of the Society. The database was then sorted into alphabetical order according to merchant surname, and any entries with names which matched those on the list (accounting for variations in spelling) were marked as members. The total nominal value of goods imported by members was then calculated, and compared to the overall total value of trade.
[90] Comparison of: McGrath, *Records*, pp. 27-33, 261, and PRO E190/1136/10.

widows, sons and brothers of established Bristol merchants, who were naturally not members of the Society, but still had firm Bristol connections. In addition, as Sacks has discussed in detail, partly as a result of the rise of the American trades, this was a period when increasing numbers of retailers, manufacturers and other non-specialist merchants (who were naturally not members of the Society of Merchant Venturers) became involved in American trade.[91] Some drop in the Society's overall share of trade is, therefore, not surprising, and not necessarily the result of an influx of outsiders using Bristol as a port.

A final point of note with regard to Bristol's American trades in the 1650s is the shifting balance between the mainland and the West Indies (see Figure 38). In 1654/5 it was the West Indies which were dominant, making up 40 per cent of Bristol's total imports compared to less than 30 from the mainland colonies. This is a very different pattern to that which is usually seen in the remainder of the century, and indeed contrasts with findings from the other Wharfage Account examined. This position was reversed in 1659/60, with the mainland colonies making up almost 47 per cent of Bristol's imports, while the West Indies were down to just over 15 per cent.

The fluctuation in Bristol's American markets perhaps reflects just how new these trades still were. Although they had come a long way, and certainly were much further advanced by the 1650s than previous historians have suggested, they were still not fully developed. Nonetheless, a significant change had certainly occurred, and there can be no doubt that by the time the Wharfage records become available Bristol's trade had changed dramatically, and indeed permanently. As much as they represent a break from Bristol's traditional trade of the previous two hundred years, the developments in these crucial years were the beginnings of an Atlantic trading system which would dominate Bristol's world for the next two centuries. Perhaps most remarkable,

[91] Sacks, *Widening Gate*, pp. 251-77.

however, is the speed of these developments. Although it seems that Bristol may have begun to have some involvement with American commerce in the late 1630s, these trades expanded from very little to complete dominance of Bristol's imports in the space of less than twenty years. There can be no doubt that this is one of the most dramatic, even revolutionary, developments in Bristol's commercial history.

Trade in the 1660s

Although Wharfage Books survive throughout the decade after 1660, the level of detail recorded declined significantly. Nonetheless, although the data from the 1664/5 Wharfage account is in many respects weaker than those from the 1650s, it still reinforces the previously observed trend of Bristol's rapidly developing overseas trade. Indeed, it suggests that the expansion of Bristol's American trades had continued to gain pace in the years after the Restoration. This section will first explore the difficulties in working with these later Wharfage Accounts and potential solutions, before moving on to what the evidence of the 1664/5 account can tell us about the continued evolution of Bristol's overseas trade. Although the earliest post-Restoration Wharfage accounts do contain slightly more information, the 1664/5 account was selected as it bridges the gap between the previously examined 1659/60 account and the earliest surviving Port Book evidence.

Problems using the 1664/5 Wharfage Account

Unfortunately, unlike the Port Books and earlier Wharfage Accounts, the 1664/5 Wharfage records do not usually list the port which the ship had come from, making any analysis based on the data more difficult. It is, however, possible to determine the origin of a ship with a reasonable degree of accuracy based on the commodities which it was carrying, as, fortunately, cargoes from a particular region tended to be made up of a very similar range of commodities. The table below gives an outline of the key commodities and make-up which were used to identify particular regions of origin.

Table 7 - Rules used to Determine the Origin of a Ship Based on the Make-up of its Cargo:

Region of Origin	Commodity Makeup
American Mainland	Predominately Tobacco.
Baltic	Deal Boards
France	Wine, Aquavita/Spirits, Paper, Canvas
Greece	Currants
Iberian Peninsula	Wine, Dried Fruit, Olive Oil
Ireland	Skins, Tallow, Frieze Cloth, Beef, Grains
Netherlands	Highly mixed cargo, often including manufactured goods such as plates and ironware. Perhaps the most difficult to spot, as can have some similarities to French trade, but also unlikely to have occurred to any great extent in 1664/5 as a result of the Anglo Dutch War.
West Indies	Mixed cargo of sugar, tobacco, and occasionally other commodities such as ginger and indigo.

To an extent the process of determining where ships had come from was aided by the few cases where the Wharfage Clerk had actually recorded the ship's origin. Using these and future references to the same ship it was possible to firmly identify the origin of 28 per cent of the trade. Conversely, there are of course marginal cases where it is impossible to place exactly where a ship came from, and it has been preferred to err on the side of caution by leaving this blank, rather than making a guess which may be in error. Nonetheless, of 1,847 individual entries in the 1664/5 Wharfage Book it has been possible to identify the probable origin of all but 53. In terms of value, the consignments for which origin could not be determined amounted to just £7,600, less than 1.55 per cent of total imports.

It goes without saying that any analysis based on data from the 1664/5 account cannot be relied on to the same extent, and cannot give the same level of detail as that based on fuller accounts. It is, for example, impossible to tell whether a ship carrying a cargo with an Iberian make-up had come from either a Spanish or Portuguese port, or possibly even

from the Atlantic Islands. Ships from Ireland also occasionally present a problem, as analysis of earlier accounts has shown that it was increasingly common for them to be carrying re-exports from the American and West Indian colonies. Unfortunately the name of the ship has not been given with each consignment, and although on the whole it seems that Jonathan Harlow's suggestion that subsequent entries were also carried on the previously listed ship is accurate, the possibility of omission on the part of the Wharfage Clerk does sometimes leave some doubt.[92] This is particularly true in the case of some ships which appear to have come from Ireland, yet were carrying significant quantities of commodities which are more characteristic of American or European trade. It is possible that these were re-exports from Ireland, or ships which had been on a multi-part voyage, but equally it could be the case that the Wharfage Clerk simply neglected to note the change of ship. In such cases, unless it is clearly a single entry in the middle of a cargo which is entirely Irish in character (therefore in all probability a re-export) the origin has been left as unknown.

The Evidence of the 1664/5 Wharfage Account

Although analysis of the regional make-up of Bristol's trade in 1664/5 must be treated with a degree of caution, the data for the overall value is as reliable as that in any other Wharfage Book. As Figure 42 shows, it certainly reinforces the findings from the 1654/5 and 1659/60 Port Books that Bristol's overseas trade had expanded significantly in the decades after the Civil War. Indeed, it suggests that in spite of the temporary drop in 1659/60, this growth had continued at a rapid pace in the years immediately after the Restoration. At nearly £496,000, recorded imports in 1664/5 are more than double those five years previously, and represent an increase of more than 40 per cent over 1654/5. As Figure 43 shows, the volume of Bristol's imports had been expanding steadily since the beginning of the decade, rising from 2,500 tons in 1660 to just under 4,000 in 1664. 1665 saw a particularly high volume of trade, with over 5,200 tons of goods imported. This, however, dropped off sharply,

Harlow, 'Life and Times', p. 172.

with only 3,200 and 2,800 tons imported in the following two years, perhaps as a result of disruption to Bristol's continental trades.

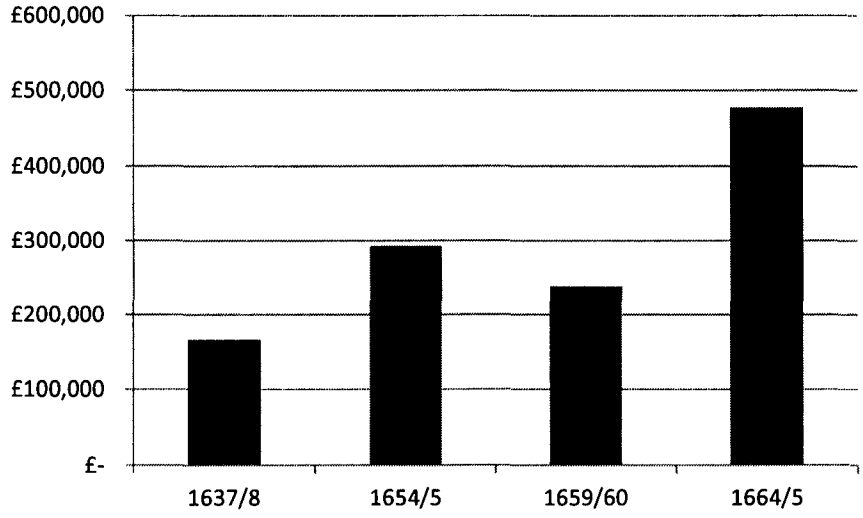

Figure 42 - Nominal Value of Bristol's Overseas Trade as Recorded in the Port Books and Wharfage Books, 1637/-1664/5:[93]

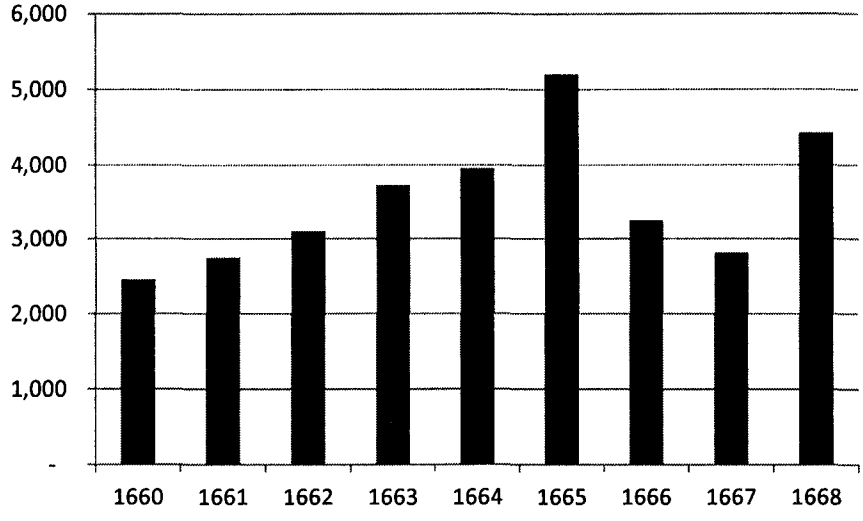

Figure 43 – Bristol's Imports as Recorded in the Wharfage Books, 1660-1668 (tons):[94]

As with 1654/5, it seems highly likely that war with the Netherlands contributed to Bristol's commercial success in 1664/5. The Second Anglo-Dutch War began on the 4th of March 1665, just three months into

[93] Based on analysis of: TNA PRO E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.3.1. The Wharfage Book values were calculated using the '1675 Book of Rates'; wine valued at £9 the ton in 1637/8, and £16 the ton thereafter.

[94] I am deeply grateful to Jonathan Harlow for providing me with totals of the Wharfage collected, which were used to calculate the tonnage figures presented in this graph. Wharfage was paid at a rate of 8d. per ton. BRO SMV/7/1/1/2; SMV/7/1/1/3. See Appendix 3.3.2.

the period covered by this set of accounts, and would have given Bristol considerable advantages. Its position on England's west coast would have given ships a safe harbour and easy access to the Atlantic, without having to run the gauntlet of privateering and naval action in the English Channel which would have caused much uncertainty for ships bound for London and ports on the south and east coasts. Bristol's status as a safe haven may have been further enhanced by the Great Plague which struck London in 1665. Although many preventative measures were put in place, and there were a few isolated cases noted both within Bristol and its suburbs, on the whole Bristol appears to have been relatively unaffected by the outbreak in comparison to London.[95] These boosts to trade are perhaps best reflected in the significant rise in both Bristol's tobacco and sugar imports. At 4.2 million lb, tobacco imports were almost three times their volume in 1659/60, and more than double their level in 1654/4 (see Figure 44). Sugar had experienced a similar rise, from 21,500 cwt in 1654/5 and 13,000 cwt in 1659/60 to 33,000 cwt in 1664/5 (see Figure 45).

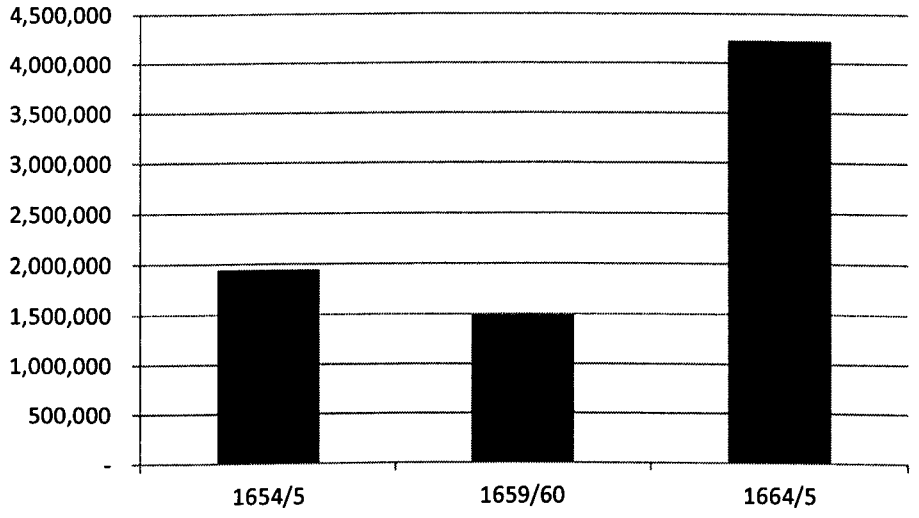

Figure 44 - Bristol's Tobacco Imports as Recorded in the Wharfage Books (lb) 1654/5-1664/5:[96]

[95] Latimer, *Annals*, pp. 333-4.
[96] BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.4.2. For notes on how the figures were converted into lb. see Appendix 2.2 and Appendix 3.1.

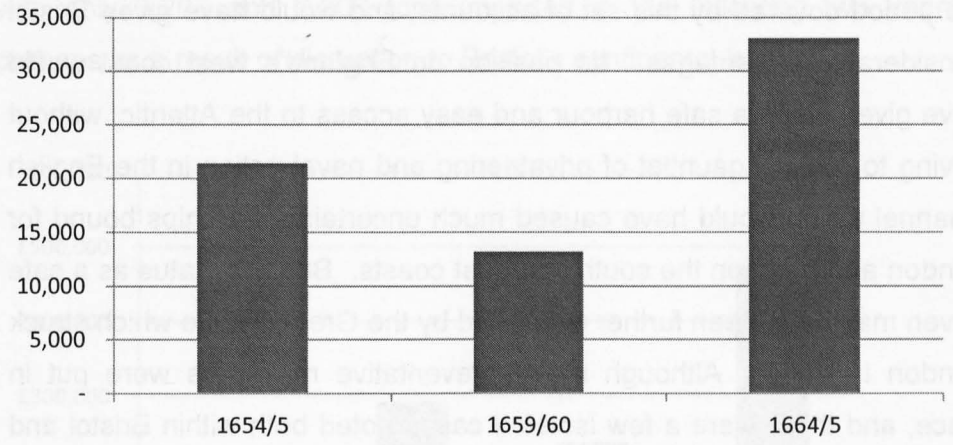

Figure 45 - Bristol's Sugar Imports as Recorded in the Wharfage Books (cwt) 1654/5-1664/5:[97]

Even though, as has already been said, any analysis of trade by probable origin in these accounts needs to be treated with a healthy degree of caution, it certainly appears that the American and West Indian trades were continuing to make up an increasingly large proportion of Bristol's overseas trade. Goods which are likely to have originated on the American Mainland made up 68 per cent of imports in 1664/5, and those from the West Indies 11 per cent, suggesting that American commerce was responsible for almost 80 per cent of Bristol's trade by the mid-1660s (see Figure 46).

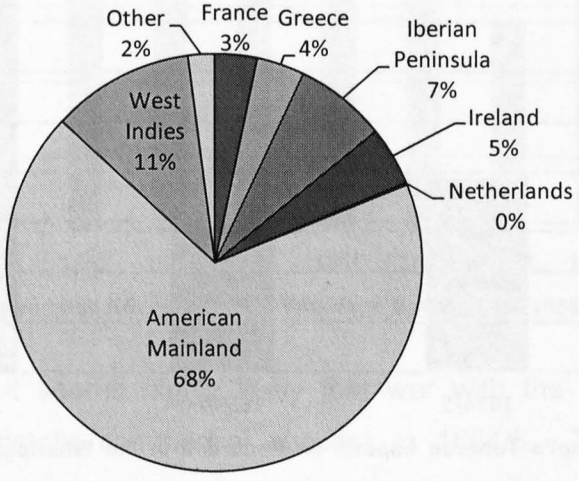

Figure 46 - Bristol's Imports by Probable Region of Origin, 1664/5 (in pounds sterling):[98]

[97] BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 3.4.2. For notes on how the figures were converted into Cwt. see Appendix 2.2 and Appendix 3.1.

[98] SMV/7/1/1/2. See Appendix 3.4.1. Values based on the '1675 Book of Rates', with the exception of wine which was valued at £16 the ton.

Although the analysis of trade by region needs to be treated with a degree of caution, the 1664/5 Wharfage Book certainly suggests that the remarkable expansion of Bristol's trade which had characterised the 1650s continued in the decade after the Restoration. Nonetheless, there is no escaping the fact that the reduction in the level of detail recorded in the Wharfage Books after the early 1660s significantly reduces their usefulness as a tool for evaluating the overall state of Bristol's trade. The absence of a declared port of origin for shipments certainly outweighs the Wharfage Books advantage of more continuous survival, particularly bearing in mind the additional work which is required to process them. From the 1670s onward, therefore, this study will revert to using the Port Books which provide both a fuller set of data and, from 1671/2, a first opportunity to look at Bristol's exports to the Americas.

Conclusions

Overall then, the mid- to long-term impact of the Civil War on Bristol's overseas trade does not appear to have been as severe as would perhaps be expected. As will be discussed in Chapter 5, although some of Bristol's traditional trades struggled at times during these years, this was perhaps more as a result of profitable opportunities arising elsewhere than any economic difficulties. Bristol's commerce as a whole seems to have continued the remarkable growth which it showed in the 1630s. The most striking feature of this evidence, however, is the rapid rise of the American trades. Further work is clearly needed to substantiate these findings, but it appears that trade with the New World colonies went from virtual non-existence to dominating Bristol's import business in the space of just sixteen years and continued to grow rapidly over the next ten years, replacing in little more than a decade a commercial structure which had stood for more than two centuries. Such a rapid transformation of the port's commercial world can justly be described as Bristol's 'American Revolution'.

Chapter 4:

The Transatlantic Trades, 1665-1689

Although not as 'revolutionary' as the developments during the Civil War and Interregnum, the continued evolution of Bristol's trade in the decades after the Restoration was in many ways equally impressive. This period saw the American trades continue to expand at a rapid rate, firmly laying the foundations for Bristol's golden years in the eighteenth century. Moreover, the survival of Port Book records from the early 1670s and beyond means that it is possible to analyse these developments in much more depth than was possible using the 1650s Wharfage Books.

This chapter presents the first detailed statistical survey of Bristol's overseas trade in the years between the restoration of the monarchy in 1660 and the Glorious Revolution in 1689. The principal focus of this chapter will be on transatlantic trade, with the final chapter considering Bristol's traditional trades. Although other records are also employed, this study is based mainly on a detailed examination of two Bristol Port Books: those from 1670/1 and 1671/2. Although a few Port Books do survive from the 1660s, these are the earliest examples from which it was possible to extract a serviceable dataset.[1] Firstly some of the methodological difficulties in working with these statistics during this period will be considered, including both the potential for 'illusory' developments as a result of changes to the customs rates, and the

[1] I am extremely grateful to Peter Taylor for alerting me to the existence of TNA PRO E190/1240/6, an outward Searcher's Port Book from 1661/2, although unfortunately it came to light too late to be used in this study. This initially escaped my attention as it has been wrongly catalogued. A second Searcher's account also survives from 1667/8 (E190/1137/1). Searcher's accounts, however, do not contain details of the custom paid, so are little better than Wharfage accounts. There is also an Inwards Customer's Account (E190/1137/2) covering Christmas 1669 to Christmas 1670, although this is in such poor condition that it was not possible to extract a data set from it.

potential impact of illicit trade on the official figures. Before embarking on the analysis, the work of previous historians on developments in the post-Restoration years will then be outlined. This will include both studies of the trade of England as a whole, and those specifically focused on Bristol. The development of Bristol's trade in the early 1670s and beyond will then be analysed in more detail. In particular there will be an emphasis on the continued rise of the American trades, with the 1671/2 Port Book being used to give a first insight into the export side of Bristol's commerce with the colonies. In addition to trade as recorded in the Port Books, the role of indentured servants and Irish provisions in the export trade will also be examined. The increased prevalence of multi-part voyages will also be discussed, including an examination of the long-standing claim that Bristol was illegally interloping into the transatlantic slave trade. Finally, consideration will be given to the triangular trade between Bristol, Newfoundland, and Spain, which linked Bristol's American and European ventures.

Methodological Challenges

A mo re detailed study of the evidence from the Port Books has the potential to add much to current understanding of the development of Bristol's overseas trade in the years after the Restoration. Before this is possible, however, it is important to have a firm understanding of a number of methodological complications, which may mean that the statistics presented by these records do not present an accurate picture of the state of trade. As has been discussed in the previous chapter, the Civil War and Interregnum saw significant changes to the system of taxation on overseas trade. It may, thus, be that some proportion of any developments apparent in the Port Books are merely reflecting these changes, rather than any actual shift in the nature or volume of trade.

As has already been mentioned, perhaps the most important change to taxation on overseas trade during this period was the significant revisions of the Books of Rates. As was discussed in Chapter 1 (see pp. 21-27) Poundage, the principal tax on overseas trade in Early Modern England,

was a tax of 1s in the pound of the value of all goods either imported or exported (5 per cent). However it was not charged on the real value of the goods as declared by the merchant, but instead according to a pre-determined list of values known as the Book of Rates. Fortunately the final revision of the Book of Rates occurred in 1660, so any increase seen during the period covered by this chapter does reflect genuine fluctuations in the value of trade passing through Bristol. Equally, as the post-1660 Book of Rates was used to process the Wharfage Book figures, the statistics from the 1670s and 80s can also be directly compared to those from the last chapter. The same, however, is not true of pre-Civil War figures. As was discussed in Chapter 3 (see pp. 109-114), although the rate of increase was not uniform, an examination of the rates for a sample of the most important commodities passing through Bristol (accounting for 93 per cent of trade) shows an average increase of 94 per cent. A simple doubling of figures from before 1642, therefore, allows them to be compared fairly accurately to those from the second half of the century.

Although adjustments to the import valuations are fairly easy to compensate for, the situation with export valuations is more complicated. When the Book of Rates was revised in 1660 the authorities adopted a distinctly 'mercantilist' policy in an attempt to protect and encourage home industry.[2] Rather than simply adjust the values in line with inflation, they chose to deliberately reduce the values on a number of English manufactured goods, most notably cloth, in an attempt to encourage their export and stimulate domestic industry. Equally they attempted to stifle foreign competition by placing much higher duties on a number of raw materials in an attempt to discourage their export. Appendix 4.1 shows the values for all 215 export commodities in the 1635 and 1675 Books of Rates which are directly comparable. The average would suggest a slight increase of 33 per cent. This, however, is far from representative of the actual changes. Raw materials experienced much more significant

[2] C.D. Chandaman, *The English Public Revenue 1660-1688*, (Oxford, 1975), pp. 11-12.

hikes in valuation, many in the region of 100-200 per cent, whereas in the case of many manufactured goods (cloth in particular) the values appear to have been halved. For the historian wishing to use the Port Books to study trade, this meddling with the values causes significant problems. Not only does it make it difficult to compare pre and post-Civil War trade, but it also makes it very hard to establish the relative importance of individual commodities amongst Bristol's exports in the post-Restoration accounts. To a lesser extent, this mercantilist policy may also have had an impact on the import valuations, as duties were increased on the import of some manufactured imports and correspondingly decreased on some raw material imports.[3] Those commodities involved, however, were not imported into Bristol to any great extent, so the import side of the Port Books at least should still be fairly reliable in showing the profile of Bristol's imports.

Finally, as with the data from the 1650s, there may be questions as to whether the prices listed for sugar and tobacco in the Book of Rates give an accurate representation of their value in relation to other goods. The price of these colonial staples certainly dropped considerably during the mid-seventeenth century, so it may be the case that the fixed Book of Rates valuation lagged behind reality.[4] Indeed, other studies have adopted much lower valuations, with one study using values of 6d. per pound for the years 1663/9 and 2.4d. per pound for 1686, rather than the 1s. 8d. suggested by the Book of Rates.[5] These fears, however, exaggerate the situation; although retail prices as low as 6d. the lb were recorded in the 1680s,[6] this was merely the price for the lowest grades of tobacco. Perhaps the best source of retail prices for tobacco is still Thorold Rogers gargantuan survey of prices. Although his figures do suggest that the price dipped as low as 1s. 6d. in the mid-1680s, in 1670

[3] Chandaman, *English Public Revenue*, p. 12.
[4] There had been an adjustment from 3s 4d. the lb. in 1642 down to 1s 8d the lb. 1660, but after this the Book of Rates remained unaltered.
[5] N. Zahedieh, *The Capital and the Colonies: London and the Atlantic Economy 1660-1700*, (Cambridge, 2010), p. 189.
[6] J.D. Marshall (ed.), *The Autobiography of William Stout of Lancaster 1665-1752*, (Manchester, 1967), p. 80.

he quotes a price which is still as high as 3s. 1½d. (see Table 8). Indeed his figures suggest an average price of 2s. 2¼d. for the period after 1670, suggesting that the Book of Rates figure of 1s. 8d. is more accurate than one of 6d.[7] Although the Book of Rates valuations were often significantly lower than current retail prices, comparison of the figures for a selection of overseas trade goods suggest that the valuations of sugar and tobacco, in the 1670s at least, were not out of line with those for other commodities (see Table 9). Overall then, even taking into account the further falls in their price which had occurred since the 1650s, no adjustment to the Book of Rates valuations for either sugar or tobacco is needed to allow the data to be processed accurately.

Table 8 - Retail Price for Colonial Tobacco, 1670-1689 (per lb):[8]

	Retail Price	
Year	s.	d.
1670	3	1.5
1674	2	6
1681	2	6
1684	1	8
1686	1	6
1687	2	6
1689	2	6

[7] J.E. Thorold Rogers, *A History of Agriculture and Prices in England, vol. V 1583-1702*, (Oxford, 1887), p. 468.

[8] Derived from: J.E. Thorold Rogers, *History of Agriculture and Prices*, pp. 467-8. Rogers was careful to differentiate between colonial and the more expensive Spanish tobacco.

Table 9 - Comparison of Retail Prices and Book of Rates Valuations, 1663-72:[9]

Commodity	Quantity	Book of Rates Valuation (1675) (£)	Average Retail Price (1663-72) (£)	Retail price as percentage of BOR value
Ginger	lb	0.07	0.05	75
Hops	cwt	1.50	4.48	299
Iron (wrought)	cwt	0.80	1.88	234
Lead (wrought)	cwt	1.00	1.15	115
Raisins	lb	0.01	0.03	194
Sugar (brown, coarse)	lb	0.01	0.04	280
Tallow	cwt	0.83	1.24	149
Tobacco	lb	0.08	0.11	131

The Impact of Smuggling

Illicit trade may have further distorted the picture of Bristol's trade presented by the official sources. Smuggling in Bristol during the sixteenth century has been the subject of a number of detailed studies; however, by the latter part of the seventeenth century it had undergone a number of developments, most notably shifting towards import rather than export smuggling.[10] Although the romantic image of the smuggler as it exists in the popular imagination, running brandy into a deserted cove in the dead of night, still lay ahead in the eighteenth century, a number of changes in the laws, most notably the introduction of additional duties, had greatly increased the incentive to smuggle a number of imported goods.

In contrast to the continued drive to import goods illicitly, the incentive to smuggle many exported goods had been removed. Increasingly efficient methods meant that agricultural production had improved significantly over the course of the seventeenth century, meaning that agricultural goods which had once been subject to scarcity were now abundant. This led to the lifting of prohibitions on the export of all manner of agricultural goods which had been the prime candidates for illicit trade in the late

[9] Based on analysis of: Rogers, *History of Agriculture and Prices vol. 5*; '1675 Book of Rates'. The values have been decimalised to aid comparison.

[10] E.T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol*, (Farnham, 2012); J.M. Vanes, 'The Overseas Trade of Bristol in the Sixteenth Century', *Unpublished PhD Thesis, University of Bristol* (1975), pp. 86-123.

sixteenth and early seventeenth centuries. Export of calf skins without licence was permitted from 1662; and four years later the export of hides, leather, corn, butter, and cheese was also allowed.[11] Where previously the Crown had attempted to restrict the export of these commodities to prevent shortages in the domestic market, it now found itself attempting to encourage their export to prevent the price from falling too low and causing difficulties for those involved in agriculture. Indeed the lawmakers even went as far as placing bounties on corn exports, meaning that, far from attempting to conceal their grain exports, merchants had an interest in making them appear to be greater in quantity than they actually were.[12] There is no evidence as to whether Bristol's merchants engaged in the re-landing of grain exports in the later seventeenth century (exporting grain then landing it further along the coast so that it could be exported again, thus claiming the bounty twice for the same grain). It is, however, clear that there was no longer any incentive for them to conceal their exports of agricultural goods. For these commodities, therefore, the Port Books can be taken as being much more reliable than earlier in the century.

A number of factors relating to the geography of the region, as well as the nature of the trades involved, meant that the smuggling which occurred at Bristol in the post-Restoration years was very different in nature to that noted elsewhere in the country during this period. On the East Coast, armed bands of 'Owlers' smuggled wool from the Romney Marshes to cloth makers in the nearby Netherlands.[13] On the south coast too, it was a relatively short voyage to France, from whence organised gangs with the collusion of the whole community smuggled high valued goods such as brandy, landing them on beaches in small boats under cover of darkness. In this way huge quantities of illicit goods made their way into the country and, although occasional violent clashes resulted, the

[11] L.A. Clarkson, 'English Economic Policy in the Sixteenth and Seventeenth Centuries: The Case of the Leather Industry', *Bulletin of the Institute of Historical Research* (1965), p. 156.
[12] N.S.B. Gras, *The Evolution of the English Corn Market*, (Cambridge, 1926), pp. 139-50.
[13] N. Williams, *Contraband Cargoes: Seven Centuries of Smuggling*, (London, 1959), p. 81

undermanned customs forces were powerless to do much about it.[14] The Severn's creeks and pills would have been ideal substitutes for the sandy beaches of the south and east coasts, but Bristol tended to be involved in longer distance trades, rather than those with nearby markets from which it would be relatively easy to run goods unseen in small boats.[15] Although the commodities had changed, the practices of illicit trade at Bristol remained much as they had been in the sixteenth century, openly unloading goods in the port, or in the creeks of the Severn with the collusion of the Customs Officers.[16] Indeed when investigating the Bristol customs administration in the early 1680s, William Culliford concluded that of the 60 customs officers only 32 were 'Good'; 20 were 'Indifferent'; and 8 were 'Badd' including one man who was frequently drunk on duty. In all he charged 16 officers with offences, and even of the honest men one was too old to do his job, and another was actually blind.[17] The risks of illicit trade at Bristol were, therefore, comparatively low; Bristol's merchants did not have to endanger their lives in the same way as the armed, specialist smugglers of other regions. The most significant punishment was likely to be forfeiture of goods, and even the threat of this could be significantly reduced by the judicious application of bribes to the customs officials.

By its very nature illicit trade went unrecorded, so it is very difficult to get any impression of its potential impact from the surviving sources. Fortunately, however, Cullifford's report into corruption in the Bristol customs service gives a good indication of the main trades in which fraud was occurring, and this can be backed up by assessing which aspects of trade would have given merchants sufficient incentive to evade duties. The main area of concern highlighted by Culliford was the tobacco trade, where it appears merchants may have been smuggling on a considerable

[14] P. Muskett, 'Military operations against smuggling in Kent and Sussex, 1698-1750', *Journal for the Society of Army Historical Research,* 52 (1974); Williams, *Contraband Cargoes*, pp. 63-81.
[15] G. Smith, *Smuggling in the Bristol Channel 1700-1850,* (Newbury, 1994), pp. 53-67.
[16] E.T. Jones, 'Illicit business: accounting for smuggling in mid-sixteenth-century Bristol', *Economic History Review* (2001), pp. 17-38.
[17] W.B. Stephens, *The Seventeenth Century Customs Service Surveyed: William Culliford's Investigation of the Western Ports, 1682-84,* (Farnham, 2012), p. 42.

scale. To a lesser extent he also noted the illicit import of linen and luxury commodities, especially from France.[18] In terms of incentive, the only duty most goods were subject to was poundage, a tax of 1 shilling in the pound (or 5 per cent). In reality, however, it often worked out far less than this, as goods were taxed on their nominal value as listed in the Book of Rates rather than their real value, which it has already been shown often lagged significantly behind the wholesale prices of the time. Even with these values having been roughly doubled during the Interregnum and early post-Restoration years, it seems highly unlikely that the costs of poundage alone would have proved sufficient motivation for Bristol's merchants to have run the risk of smuggling their goods. It was, therefore, only trades which were subject to either exceptional rates of taxation, or other restrictions, where smuggling is likely to have occurred.

A number of goods were subject to higher rates of duty. Wine in particular was liable to a number of additional duties more than doubling the custom due, which increased the motivation to trade illicitly. For example, when Robert Vickris declared a consignment of 10 butts of sack on the *Zant Frigott* in January 1672 he paid: £15 in Custom; £20 in New Impositions; and £2 10s. in Coinage.[19] Taking a wholesale value of perhaps £24 per butt, this amounts to a combined tax of 16 per cent, a considerable step up from the 2-3 per cent paid by goods only subject to poundage.[20] Although the wholesale price was lower, the duties were even higher on French wines. When John Knight declared 7 tons of French wine later that month he paid a total of £88 10s. 5¼d. in duties, or the equivalent of at least a 26 per cent tax.[21] Such high duties would certainly have eaten heavily into the merchants' profits, and provided a significant incentive to conceal at least part of their wine imports.

[18] Stephens, *Seventeenth Century Customs Service*, p. 47.
[19] PRO E190/1138/1 ff. 18v, 23r.
[20] J.A.S. Harlow, 'The Life and Times of Thomas Speed', *Unpublished PhD Thesis, University of the West of England*, (2008), p. 193.
[21] PRO E190/1138/1 ff. 21v, 23v.

Perhaps contrary to expectations, the notorious Excise, which was to account for much of the smuggling that occurred in the eighteenth century and beyond, may have had relatively little effect on overseas trade at Bristol during the post-Restoration years. Excise had been introduced during the Interregnum as a money raising expedient and applied to the first sale of goods, thus taxing domestic as well as overseas trade. Initially it applied to a wide range of commodities, but when the tax system was revised at the Restoration this was restricted to just a few.[22] The majority of goods subject to Excise were imported liqueurs, as well as luxuries such as coffee, sherbet, tea, and chocolate, commodities which had never been imported into Bristol to any great extent. Tobacco and wine (two of Bristol's most important imports), on the other hand, were not required to pay Excise in the years after the Restoration.

Even though it escaped the Excise, tobacco was still subject to prohibitively high rates of duty. Based on a comparison of weights in England and Virginia, Nash has suggested that tobacco smuggling in the outports was on a fairly limited scale in the late seventeenth century. By comparing the amount of tobacco declared for customs with independent records of the ships lading, he concluded that in 1700 the weight of tobacco declared at Bristol was only 3 percent less than the true total imported.[23] Nonetheless, there was considerable incentive for Bristol's merchants to smuggle tobacco at this time, and other evidence from Bristol suggests that imports were being concealed on a noteworthy scale. As a result of the distaste of both James I and Charles I for the leaf, tobacco had been subject to high rates of duty since the early seventeenth century. Even though it did not fall subject to Excise until after this period, tobacco was still required to pay a number of additional duties in the post-Restoration years.[24] As a result of the collapse of its price over this period, the poundage paid by tobacco was also higher in relation to its wholesale value than on other goods. The Book of Rates

[22] Chandaman, *English Public Revenue*, p. 41.
[23] R.C. Nash, 'The English and Scottish Tobacco Trades in the Seventeenth and Eighteenth Centuries: Legal and Illegal Trade', *Economic History Review* (1982), pp. 357-9.
[24] Chandaman, *English Public* Revenue, pp. 12-17, 20.

valuations which determined the amount of poundage paid were usually much lower than the wholesale value of these commodities. In the case of tobacco, however, as the Book of Rates had been not been updated to account for its falling price, the valuation and thus duty paid was proportionately higher than other goods. While the valuations of the majority of commodities were between 30 and 50 per cent of their wholesale value in the 1670s, that of tobacco was 76 per cent of its sale price. This meant that poundage amounted to a 3.8 per cent tax on tobacco, compared to say raisins which paid the equivalent of 2.6 per cent, or iron a mere 2.1 per cent. This on its own probably would not have proved sufficient incentive to smuggle tobacco. The addition of further duties, however, nearly doubled the amount of custom which this commodity had to pay. For example: when Patrick Floyde declared 60lb of tobacco out of the *Lisborne Merchant* on the 5th of March 1672 he paid 13s. 4d. poundage; however, this was supplemented by an additional duty of 12s. 4d., amounting to a total tax of 9 per cent if we take an average wholesale price for tobacco of 2s. 2¼d.[25] Due to the high transport costs, the profit margin in the colonial trades could actually be fairly narrow, so this level of tax may well have created a significant incentive to smuggle.[26]

According to Culliford's evidence, as much as £100 worth of tobacco duty was lost on every ship that came in from the colonies.[27] This £100 of duty would suggest that a significant portion of Bristol's tobacco was smuggled; for example, the *Barbados Merchant* paid £495 in duty in 1671/2 when unloading its cargo of tobacco, so if £100 worth of duty had been evaded that would mean 17 per cent of its cargo had been smuggled.[28] Further evidence for customs fraud in the tobacco trade comes from 1691, just after the period covered by this chapter, when the collector at Bristol John Dutton Colt put a spy onto the *Bristol Merchant*

[25] PRO E190/1138/1 f.21r.
[26] J.A.S. Harlow (ed.), *The Ledger of Thomas Speed, 1681-1690*, Bristol Record Society Vol. 63 (2011), p. xxxi.
[27] Williams, *Contraband Cargoes*, pp. 84-5.
[28] PRO E190/1138/1, ff. 95r-105v.

which was importing tobacco into Bristol.[29] He uncovered a serious fraud, implicating twenty-two Bristol merchants, who paid a fine of over £2,700, as well as several customs officers, who were fined £500. Perhaps more interesting, however, is a case from 1693 where, a group of merchants deliberately implicated one of the customs officers who had uncovered their underhand dealings. In the ensuing legal proceedings John Row, a Patent-Waiter at Bristol who had also been involved in the 1691 *Bristol Merchant* investigation, revealed that he had been solicited to participate in a customs fraud that would, he claimed, have cost the King £2,000 a year and gained himself many hundreds of pounds. Compared to £20,000 worth of duty paid in tobacco in 1671/2 this would equate to roughly 9 per cent of Bristol's tobacco imports being smuggled, or 16 per cent compared to £10,250 paid in 1670/1. Having said this, however, as the scheme was the work of just one group of merchants the overall total may well have been higher.[30] His petition reveals that Row had subsequently accepted a bribe of £10 to allow the illicit import of a relatively small consignment of cocoa nuts, claiming they were indigo, after which: 'the said Merchant and others to be revenged on Your Petitioner for the discovery of the said great fraud of Tobacco did voluntarily informe against Your Petitioner although to their own losse of One hundred and fifty pounds'.[31] Clearly Bristol's merchants were prepared to take drastic action against those whose honesty ran counter to their collective interests.

It was not just high duties which gave merchants incentive to trade illicitly; monopolies and trade prohibitions which officially excluded Bristol men from potentially profitable markets would also have given them considerable incentive to operate outside the law. The development of the political situation, as well as the English economy, meant that such prohibitions and monopolies had come to play a much less significant part than earlier in the century. There were, however, a few notable

[29] McGrath, *Merchants and Merchandise*, pp. 222-4.
[30] PRO E190/1137/3; E190/1138/1.
[31] McGrath, *Merchants and Merchandise*, pp. 224-5.

exceptions. As has already been mentioned, the prohibitions on the export of many agricultural goods had been lifted in the years after the Restoration, therefore there is little reason to suspect Bristol merchants of smuggling goods out of the country in these years, and the new charter granted to the Society of Merchant Venturers of Bristol in 1643 (ratified in 1665) permitted them to trade to many of the monopoly protected regions.[32] The only two noteworthy monopolies from which they remained excluded, therefore, were those of the East India Company, and the Royal African Company. The riches of Africa and the triangular trade may well have proved tempting to Bristol's merchants, and the possibility of their interloping into this monopoly protected trade will be discussed in more detail later in the chapter.[33] However, it seems highly unlikely that Bristol merchants would have considered interloping into the East India trade. Although the rewards of this trade were potentially rich, it required huge capital investment, with voyages lasting upwards of 18 months; indeed Bristol had previously been offered a chance to share in an East India venture, but had turned it down.[34]

One final legal barrier to trade which may have tempted Bristol merchants to trade illicitly in the post-Restoration years is the numerous prohibitions on trade with particular nations which resulted from the frequent wars and political tensions of this period. Bristol's links with the Netherlands were never particularly great, so the impact of the Dutch Wars in this regard is questionable; however, there were also at times prohibitions on trade to both Spain and France. These were much more crucial markets, which Bristol merchants would have been loath to suspend their trade to. Indeed much of English commercial policy at this time seems to have been aimed at limiting French power and economic development, with several pieces of legislation designed to suppress French trade being the result. The consequent high duties on French wine have already been examined, but this mercantilist policy also resulted in high duties on other

[32] McGrath, *The Merchant Venturers of Bristol: A History of the Society of Merchant Venturers of the City of Bristol from its origin to the present day,* (Bristol, 1975), pp. 56-7.
[33] See below pp. 182Newfoundland Sack Trade187
[34] McGrath, *Merchant Venturers*, p. 58.

French imports, most notably linen.[35] As Culliford's report shows, this resulted in wine and linen being smuggled into Bristol in considerable quantities.[36]

A final caveat to consider with regard to the role of smuggling in late seventeenth century Bristol is provided by Jonathan Harlow's work on the ledger of Thomas Speed. Comparison of goods recorded in Speed's ledger with the Merchant Venturers' Wharfage Books (virtual copies of the Port Books) has shown the entries to be virtually identical, suggesting that Speed did not smuggle any of his goods; a marked contrast to the ledger of John Smyth, one of Bristol's greatest merchants in the previous century.[37] Whether or not this was a result of his Quaker principles, Speed was notable throughout his career for his honest dealings, as well as a certain lack of ruthlessness in the pursuit of maximum profits (despite being one of the most successful Bristol merchants of this time).[38] In an era when Bristol appeared to be rife with illicit activities, it is worth noting that one Bristol merchant at least did not engage in illicit trade, and that this may have been true of others.

Overall, therefore, smuggling may have had a significant impact on the figures recorded in the Port Books; however, understanding of the nature and motives for smuggling should allow the types of goods smuggled, and the impact of this on the figures to be gauged with a fair degree of accuracy. Due to the ending of the majority of prohibitions as well as the comparatively low level of duty on manufactured wares, goods are unlikely to have been smuggled out of the country to any great extent. The export side of the Port Books, therefore, probably gives a fairly accurate representation of trade. The majority of imports are also unlikely to have been smuggled; a poundage tax amounting to perhaps just 2 or 3 per cent would not have made it worth running the risk. Therefore, the only area where the figures are likely to have been seriously distorted are

[35] Chandaman, *English Public Revenue*, pp. 14-17.
[36] Stephens, *Seventeenth Century Customs Service*, p. 47.
[37] Harlow, 'Life and Times of Thomas Speed', p. 260; Jones, 'Illicit Business', pp. 17-38.
[38] Harlow, 'Life and Times of Thomas Speed', pp. 258-70.

those commodities which were subject to exceptionally high duties. French goods, including wine but especially linen, consequently were smuggled in substantial quantities. The most important of Bristol's imports subject to evasion, however, was tobacco; the sources suggest that somewhere between 9 per cent and 17 per cent of Bristol's tobacco imports may have been smuggled. On the other hand, this does not necessarily have a serious effect on the accuracy of the overall picture of Bristol's trade presented by the Port Books; there can be no doubt that Bristol's tobacco trade had undergone a significant expansion by the 1670s, and additional smuggled imports would merely amplify this trend.

Previous Approaches – National

Whereas the Interregnum has been largely neglected by economic historians, the period beyond 1660 has been the subject of a plethora of studies. These years saw the first phase of what has been described by Davis as 'a Commercial Revolution', which was to have a wide range of implications for both economic and social life in England, and indeed played an important part in laying the foundations for the Industrial Revolution of the late eighteenth and early nineteenth centuries.[39] The years between the Restoration and the Glorious Revolution saw a great extension of the area to which England traded, with routes to the Americas and India finally coming to fruition and sending very large quantities of goods back to England.[40] Overall, the benefits of these developments to trade as a whole are clear to see; England's exports increased by more than half over the period 1660-1700, and imports grew by as much as a third in the same years.[41]

As will be discussed in more detail in the next chapter, the growth of long-distance routes also had a beneficial effect on trade with the continent, as

[39] R. Davis, *A Commercial Revolution: English Overseas Trade in the Seventeenth and Eighteenth Centuries*, (London, 1957).
[40] Davis, *Commercial Revolution*, p. 4.
[41] C. Wilson, *England's Apprenticeship, 1603-1763* (London, 1965; 2nd ed., London, 1984), p. 161.

England became a significant re-exporter of colonial goods.[42] Also worthy of note, although it did not become truly significant until the eighteenth century, is the increased role of manufactures other than cloth amongst England's exports. Although they still only accounted for 8 per cent of the trade at the close of the seventeenth century, the export of non-cloth manufactures had more than doubled in value since the Restoration, with the demands of the American colonies finally ending London's cloth exporting monoculture, and providing a stimulus to English industries which was to set them well on the path to their dominance in later centuries.[43]

It was not just the markets and commodities involved in trade that were changing; the development of the colonial routes was also beginning to lead to a shift in the balance of trade within England itself. As Ramsay has pointed out, although London's trade continued to prosper and expand throughout these years, its relative predominance began to decline.[44] London's domination of England's overseas trade had been built largely on its close proximity to the crucial Netherlands markets. With the rising importance of the Atlantic economy, however, and in particular the American colonies, outports such as Bristol, Exeter, and Liverpool held a geographic advantage. This led to a newfound prosperity in many of the outports, and over the course of the late seventeenth and into the eighteenth century saw them claim a larger proportion of England's trade. In the period covered by this chapter this 'Rise of the Western Ports' was still in its infancy; Bristol's trade was still dwarfed by that of London, and Liverpool was only just beginning to reach beyond Irish markets.[45] Nonetheless, as many of the most dynamic elements of England's trade now lay elsewhere, for the years after the Restoration it is increasingly the case that evidence from London cannot be used to tell the story of trade in the country as a whole. The

[42] Davis, *Commercial Revolution*, p.4; Wilson, *England's Apprenticeship*, p. 161.
[43] R. Davis, 'English Foreign Trade, 1660-1700', in W.E. Minchinton (ed.) *The Growth of English Overseas Trade in the Seventeenth and Eighteenth Centuries*, (London, 1969), pp. 83-4.
[44] G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence*, (London, 1957), pp. 133-4.
[45] Ramsay, *English Overseas Trade*, pp. 132-165.

importance of a detailed study of the development of the trade of Bristol, the pace-setter among the outports, should not, therefore, be underestimated.

Previous Approaches – Bristol

Much of the work of historians on Bristol's trade in this period has been covered in the previous chapter, and so will only be recapped briefly here. The general consensus can perhaps best be summed up in the words of G.D. Ramsay: 'after the restoration in 1660, the great age of the city began anew' as 'a new commercial network was taking shape', Bristol having 'found a place as a major emporium of Atlantic trade'.[46] Due to the impenetrable nature of the quantitative sources, and the lack of computer technology to make it possible to process this material, previous studies have, however, presented relatively little in the way of statistical evidence to back up their conclusions. Ramsay, for example, relied on building work as evidence of Bristol's renewed prosperity, citing the expansion of Bristol's suburbs and the grandeur of its streets, and most significantly the building of new quays and cranes to service the expanding trade.[47] While this certainly provides some indication of the state of trade, it is not the kind of firm statistical evidence that can support anything more than the broadest of conclusions.

Perhaps the greatest body of work on this period is that of Patrick McGrath, whose studies provide a wealth of qualitative evidence about life in the port of Bristol in the late seventeenth century, in particular the work of the Society of Merchant Venturers of Bristol.[48] From the simple evidence of the fourfold increase in size of the Port Books, McGrath concluded that 'Bristol rose high on the tide of national prosperity' in the

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[46] Ramsay, *English Overseas Trade*, p. 146.
[47] Ramsay, *English Overseas Trade*, pp. 150-1.
[48] P. V. McGrath, *Records Relating to the Society of Merchant Venturers of the City of Bristol in the Seventeenth Century, Bristol Record Society Vol. XVII* (1952); McGrath, *Merchants and Merchandise in Seventeenth-Century Bristol,* Bristol Record Society, Vol. XIX (1955); McGrath, 'The Society of Merchant Venturers and the Port of Bristol in the Seventeenth Century', *Transactions of the Bristol and Gloucestershire Archaeological Society*, volume 72 (1953); McGrath, *The Merchant Venturers of Bristol: A History of the Society of Merchant Venturers of the City of Bristol from its origin to the present day,* (Bristol, 1975).

post-Restoration years.[49] By counting the number of ships going into and coming out of the port, he also noted the rise of the American trades. His figures show that West Indian and American shipping was just over a sixth of the total in 1667-8, rising to between a third and a quarter during the period 1685-7; although he correctly noted that, due to the size and value of the commodities they carried, these trades were likely to be more significant than the figures suggest.[50] As the previous chapter has shown, these figures certainly represent a considerable underestimation (with West Indian and American trade accounting for around 70 per cent of Bristol's trade, rather than the 14 per cent suggested by McGrath in the mid to late 1650s) and so a more detailed examination of the statistical evidence is certainly more than justified.

The export data provided by the Port Books also means that it will be possible to test some of D.H. Sacks' theories about the nature of Bristol's American trade in these years. On the whole Sacks' focus for this period had shifted away from the actual business of trade, with his attention principally falling on the resultant social tensions. Sacks did include a one sentence reference to evidence from the Port Books regarding the growth of Bristol's American trades. His figures suggested that: 'leaving the Irish trade and coastal enterprise aside, seaborne traffic to and from the American colonies in the early 1670s accounted for about 45 percent of the vessels and 60 percent of the tonnage frequenting the port of Bristol'.[51] By omitting the Irish trade, Sacks' figure is closer to reflecting the true situation than those produced by McGrath. A single tonnage based figure, however, particularly one from a year when the proportions of Bristol's trade were distorted by war with the Dutch, is not really sufficient evidence to chart such a momentous development. In general, Sacks suggested that 'some historical processes of this magnitude are captured in a single source [that can] let us see a whole world in a grain of sand'; in the case of late seventeenth century Bristol, Sacks has

[49] McGrath, *Merchants and Merchandise*, p. xx.
[50] McGrath, *Merchants and Merchandise*, p. xxi.
[51] D. H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700*, (Berkley, 1991), p. 279.

suggested that the city's *Register of Servants to Foreign Plantations* is just such a document.[52] At times Sacks implied that the trade in indentured servants accounted for the bulk of Bristol's exports to the American colonies. For example, he suggested that we should 'consider trans-Atlantic commerce as a two-way traffic, with each shipment of servants resulting in a return cargo of sugar or tobacco'.[53]

The most recent study of Bristol's trade in the later seventeenth century is that of Jonathan Harlow, who examined in detail the career of the Quaker Thomas Speed, one of Bristol's most successful merchants in this era. As a backdrop to Speed's activities, Harlow collated total tonnage figures from the Wharfage Books.[54] These figures show Bristol's trade more than doubling from the mid-1650s to a peak in the early 1670s; although after this it fell off to little more than its 1650s level.[55] These figures, however, are based exclusively on the tonnage of Bristol's trade, so on their own cannot be relied upon to give an accurate measure. As with McGrath's figures, they take no account of the potential variations in the value of commodities in relation to their bulk.

Trade in the 1670s and Beyond

Once the first Port Books are available in the early 1670s the story is much the same as that seen in 1664/5, confirming that Bristol's trade had continued to expand well beyond the level seen in the 1650s (see Figure 47). Bristol's imports were slightly down in 1670/1 at £422,000, possibly reflecting the resumption of normal trading conditions following the end of the Second Anglo-Dutch War. Nonetheless, this still represents a considerable overall growth of trade, being almost 60 per cent higher than the average of Bristol's imports in the 1654/5 and 1659/60 accounts. The outbreak of the Third Anglo-Dutch War in 1672 and resultant deflection of shipping away from the English Channel once again saw a boost to Bristol's trade. Recorded imports in 1671/2 were as high as £567,000,

[52] Sacks, *Widening Gate*, pp. 251-2.
[53] Sacks, *Widening Gate*, p. 260.
[54] Harlow, 'Life and Times of Thomas Speed', pp. 168-175.
[55] Harlow, 'Life and Times of Thomas Speed', pp. 174-5.

more than 30 per cent up on the previous year. Although they are not a completely reliable measure, figures from the Wharfage Books for the total weight of goods imported into Bristol imply that, at between 4,000 and 4,200 tons, trade in 1670/1 and 1671/2 was reasonably in character with the surrounding years. That the volume of goods imported in 1671/2 remained the same despite the significant increase in recorded value is probably a result of a decline in the Irish trade, which carried large volumes of low value goods (see pp. 211-219).

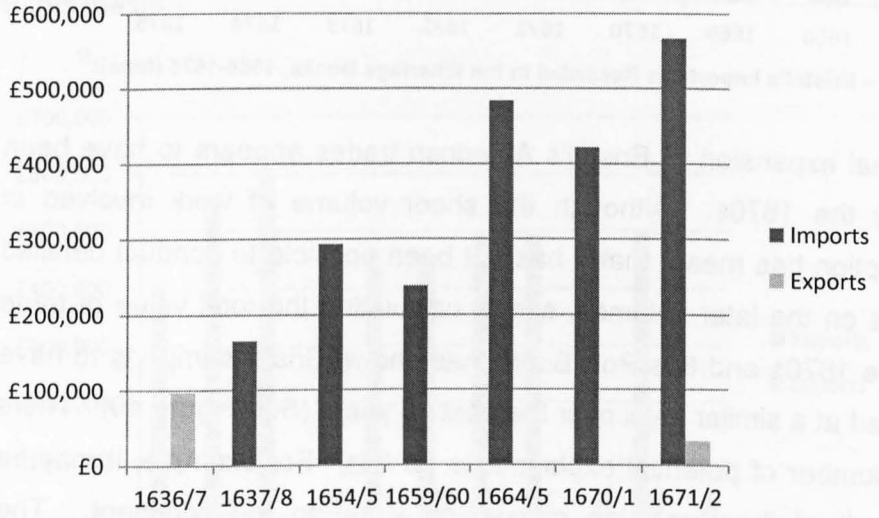

Figure 47 - Bristol's Overseas Trade as Recorded in the Port Books and Wharfage Books, 1636/7-1671/2:[56]

[56] TNA PRO E190/1136/8; E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/1/2. See Appendix 4.2.1. The pre-Civil War figures have been doubled to account for changes in the customs rates, and the Wharfage Book figures for 1654/5, 1659/60, and 1664/5 were calculated using the 1675 Book of Rates. Wine was valued at £9 per ton up to 1642 and £16 per ton thereafter, cloths of assize were valued at £4.50 and £9, and leather at £2.25 and £4.50 per dicker. These valuations have been used throughout the chapter.

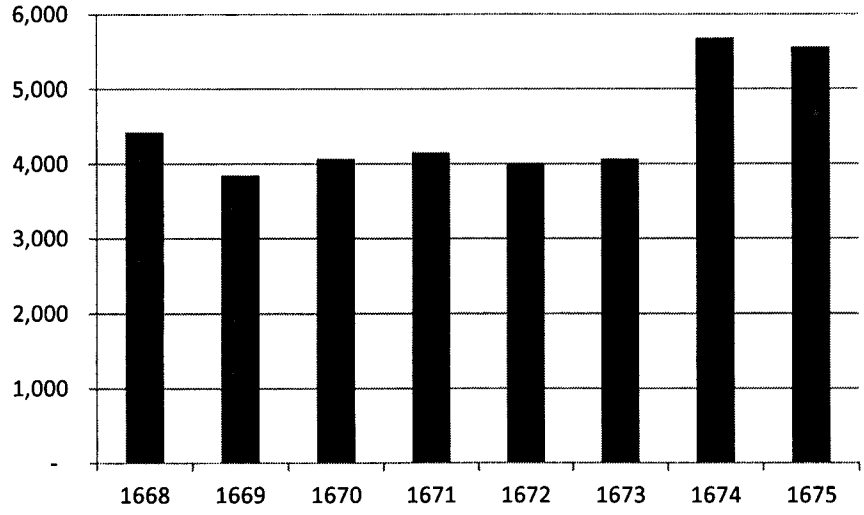

Figure 48 – Bristol's Imports as Recorded in the Wharfage Books, 1668-1675 (tons):[57]

The initial expansion of Bristol's American trades appears to have been over by the 1670s. Although the sheer volume of work involved in transcription has meant that it has not been possible to conduct detailed analysis on the later volumes, simply calculating the total value of trade from the 1670s and 80s Port Books has shown Bristol's imports to have remained at a similar level over the next 15 years (See Figure 49). There are a number of potential explanations for this. For example, it may be the result of the disruption caused by wars on the continent. The continued fall of the tobacco price may also have played some part, with prices dropping below 2s. per lb in the 1680s. While the English wholesale price for tobacco fell by as much as 1s. per lb between the early 1670s and 1686, there was no corresponding drop in the price in the colonies, meaning that the profitability of the colonial trades would have been significantly reduced.[58] This situation could also have been aggravated by the introduction of additional impost duties on tobacco in 1685, which may also have encouraged increased smuggling, thus resulting in a reduction of recorded imports.[59] Harlow, working with the

[57] I am deeply grateful to Jonathan Harlow for providing me with totals of the Wharfage collected, which were used to calculate the tonnage figures presented in this graph. Wharfage was paid at a rate of 8d. per ton. BRO SMV/7/1/1/3; SMV/7/1/1/4; SMV/7/1/1/5; SMV/7/1/1/6. See Appendix 4.2.2.

[58] Rogers, *History of Agriculture and Prices,* pp. 467-8; Sacks, *Widening* Gate, pp. 284-5; Russell R. Menard, 'The tobacco industry in the Chesapeake colonies, 1617-1730: an interpretation', *Research in Economic* History, 5 (1980), pp. 109-77.

[59] Zahedieh, *Capital and the Colonies*, p. 205.

Wharfage Books, has even suggested that Bristol's trade may have begun to decline by the end of the century, reaching little more than its 1650 levels by 1700.[60] However, although the pre-1689 Port Books do show a slight drop off from their 1670s peak, this is still far from being a decline, with imports still well over £400,000 throughout the 1680s. It seems, therefore, that if Bristol's recorded trade did decline towards the end of the century, the origins of this lay in the wars and changes to the customs duties which occurred after the 1689 Revolution, rather than any long-term instability in trade. This matter, however, lies beyond the scope of this thesis.

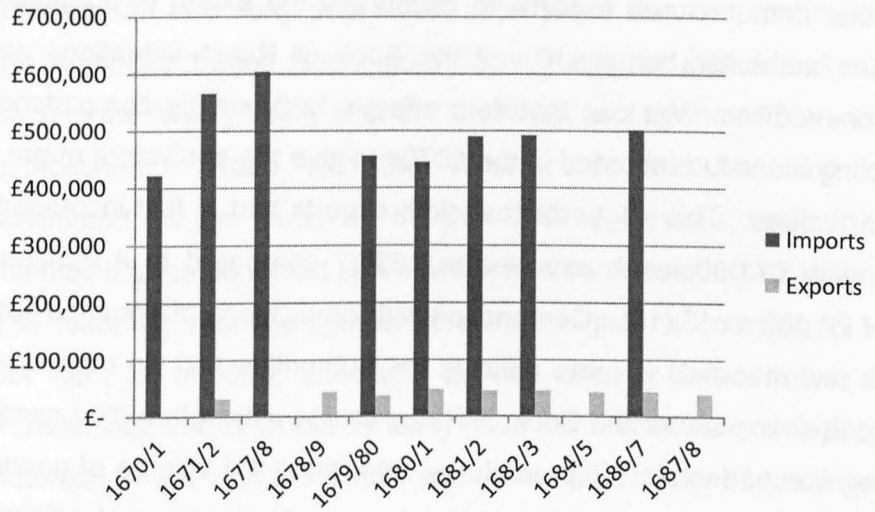

Figure 49 - Bristol's Overseas Trade in the 1670s and 80s, as recorded in the Port Books:[61]

The figures for exports are more confusing as the poundage paid suggests a decline in the value of Bristol's exports between 1636/7 and 1670/1, resulting in a massive gulf between imports and exports. This would seem highly unlikely bearing in mind the significant increase in imports, which all logic would suggest necessitated an expansion of exports, and certainly not a decline. As long-distance voyages became more prevalent, resulting in much higher transport costs, a significant gap between imports and exports is certainly to be expected, although not to

[60] Harlow, 'Life and Times of Thomas Speed', pp. 174-5.
[61] TNA PRO E190/1137/3; E190/1138/1; E190/1139/2; E190/1140/2; E190/1144/1; E190/1144/1; E190/1146/1; E190/1147/2; E190/1148/1; E190/1149/1. See Appendix 4.2.1.

this extent. Figures for the country as a whole suggest that it was not uncommon for the value of imports to be six times greater than that of exports. The gulf in the Bristol figures, however, seems improbable. Recorded imports in 1671/2 were more than eighteen times the value of exports. It seems much more likely, therefore, that the drop in export value recorded in the Port Books was merely the result of mercantilist tampering with the Book of Rates values, not a decline in the real value of goods being exported.

Comparing the volumes of goods being exported before and after the Civil War confirms this hypothesis. Fortunately in the case of cloth, and many other manufactured exports, to encourage the export of domestic goods the authorities simply halved the Book of Rates valuations on these commodities. We can therefore effect a fairly simple comparison by doubling the value recorded in the 1670s to give the equivalent of pre-Civil War values. This suggests that cloth exports had in fact increased slightly, with £7,000 worth exported in 1636/7 compared to a nominal value of £9,300 in 1671/2. Comparison with other types of commodities such as raw materials is more difficult; the authorities had no motive to promote their export, so the Book of Rates values were often increased. However, comparison is still possible by calculating the volume of goods exported. In the case of lead exports this actually reveals a significant increase, with 503 fodders exported in 1671/2 compared to 189 in 1636/7. It seems therefore that the post-Restoration poundage figures on exports may be completely misleading, so need to be treated with extreme caution. The apparent decline may certainly be as a result of changes in duty rather than an actual change in the volume of trade, with exports possibly even experiencing a significant increase, rather than a decline.

The overwhelming trend in the post-Restoration Port Books is, therefore, one of continued expansion, and indeed significant expansion. Following the considerable growth which had occurred during the Interregnum, Bristol's imports continued to rise during the post-Restoration years,

reaching more than one and a half times their value during the 1650s. Although the evidence is more complicated, it seems that exports may also have grown considerably. This expansion was the result of Bristol merchants exploiting new markets, rather than developing their pre-existing trades as they had done before the Civil War, and consequently occurred at a much faster pace. To understand these developments and the forces driving them we must, therefore, examine the changes in each branch of Bristol's trade in more detail.

Growth of the American Trades

The most significant development of Bristol's trade during the Interregnum and early post-Restoration years was the continued rise of the Americas' trades (see Figure 50). These had developed at a rapid pace in the twenty years after the Civil War, and by the 1670s were firmly established. Trade with the West Indies and mainland colonies accounted for as much as 60 per cent of Bristol's trade in 1670/1, maintaining the dominant share which had been established in the 1650s. The following year the figures were even higher, accounting for over 90 per cent of imports; although, as has already been noted, Bristol's transatlantic trades would certainly have been boosted in this year by the outbreak of war with the Dutch, and the resultant risks of passing through the English Channel to reach London. As in the previous chapter, and indeed as he himself suspected, these figures confirm that Bristol's American trades had come to dominate the port's activities much faster than McGrath's shipping based figures suggested. His superficial examination of the Wharfage Books showed that American shipping accounted for just over one sixth of Bristol's total in the late 1660s (17 per cent), rising to between a third and a quarter by the late 1680s (25-33 per cent).[62]

[62] McGrath, *Merchants and Merchandise*, p. xxi.

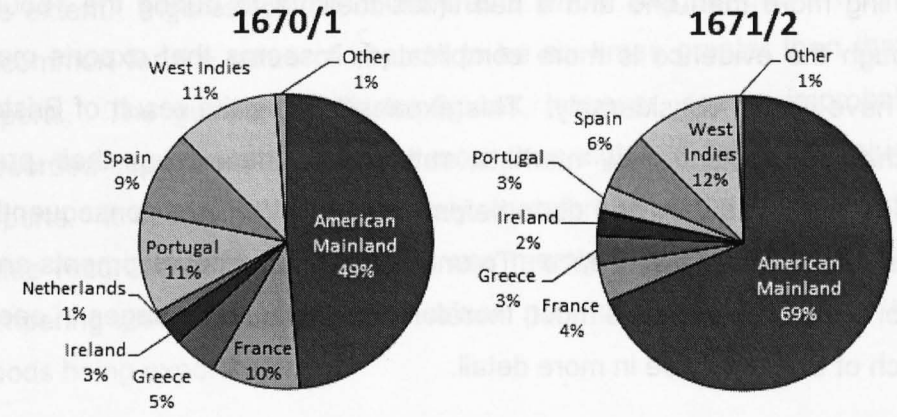

Figure 50 - Bristol's Imports by Country of Origin, 1670/1 and 1671/2 (in pounds sterling):[63]

More importantly, the Port Books show that these trades had also continued to increase in value, confirming the trend suggested by the 1664/5 Wharfage Book (see Figure 51). Combined American imports totalled £252,000 in 1670/1, a definite increase on the figures of £205,000 and £148,000 recorded in the 1650s. With the added boost provided by the Anglo-Dutch War the figure for 1671/2 was much higher again, at just over £461,000. It must also be borne in mind that, due to the potentially large scale smuggling of tobacco, the value of the American trades may in fact have been significantly higher than that recorded in the Port Books.

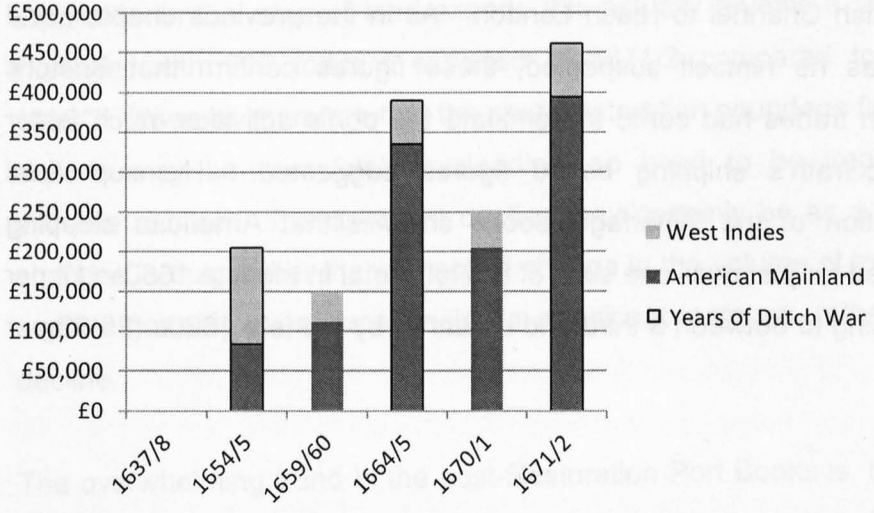

Figure 51 - Bristol's American Trade as Recorded in the Port Books and Wharfage Books, 1637/8-1671/2:[64]

[63] TNA PRO E190/1137/3; E190/1138/1. See Appendix 4.3. Wine valued at £16 per ton.

Imports

As was the case during the Interregnum, the commodities involved in Bristol's American trade show a typically colonial pattern. Imports from both the mainland colonies and West Indies consisted almost entirely of cash crops, and were exchanged for English manufactures and provisions. Although a variety of exotic goods were still imported in small quantities, the 1670s Port Books show tobacco and sugar to have continued their dominance (see Figure 52). Indeed in both 1670/1 and 1671/2 tobacco and sugar together accounted for almost 99 per cent of Bristol's American imports, with tobacco alone making up in excess of 80 per cent.

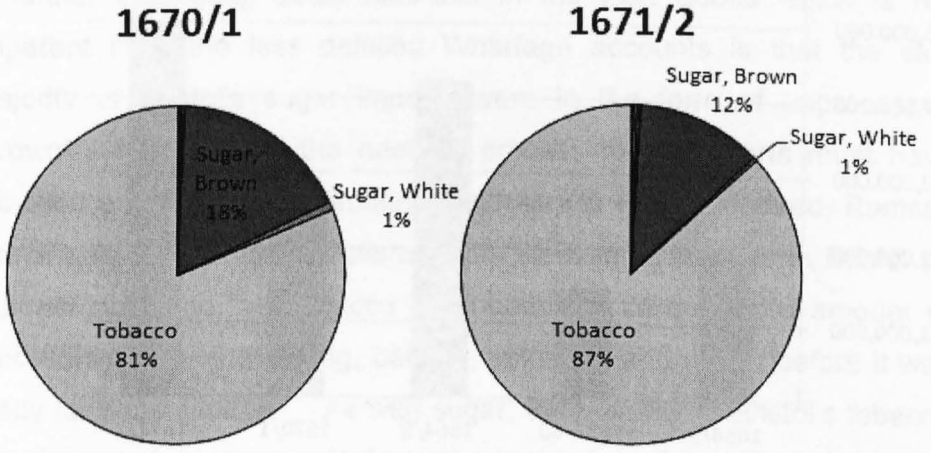

Figure 52 - Bristol's American and West Indian Trades by Commodity, 1670/1 and 1671/2 (in pounds sterling):[65]

The volumes of tobacco and sugar imported also show these trades to have continued their growth (see Figure 53 and Figure 54). Although additional impetus from the Dutch Wars in 1664/5 and 1671/2 distort the picture slightly, the 1670/1 figures (at 2,600,000 lb and 29,500 cwt respectively) still show a considerable growth from the 1650s figures. Indeed the volume of tobacco imported into Bristol in the early 1670s was not far short of the volumes attained in the eighteenth century at the

[64] TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV7/1/1/2. See Appendix 4.3. The values from the Wharfage accounts were calculated using the '1675 Book of Rates'.
[65] TNA PRO E190/1137/3; E190/1138/1. See Appendix 4.4.1.

height of this trade. Up until the American War of Independence in 1775 Bristol's tobacco imports averaged around 4.4 million pounds per annum, falling to not much more than 3 million lb in some years.[66] The 5 million lb imported in 1671/2 in fact surpasses all but the four highest annual imports recorded during the eighteenth century, and even in peacetime the 2.6 million lb imported in 1670/1 had already reached almost 60 per cent of the average for the following century. It was, however, sugar, not tobacco, which was set to become the driving force of trade in Bristol's 'golden years', and at 29,500 cwt in 1670/1 and 37,000 cwt in 1671/2 Bristol's sugar imports still had a long way to expand to reach the 144,000 cwt and more per annum of the 1730s.[67]

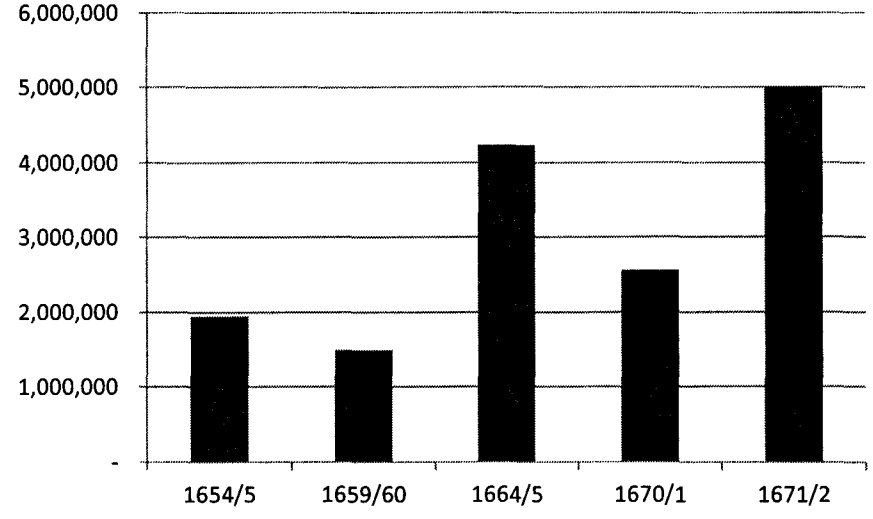

Figure 53 - Bristol's Recorded Tobacco Imports, 1654/5-1671/2 (lb):[68]

[66] K. Morgan, *Bristol and the Atlantic Trade in the Eighteenth Century*, (Cambridge, 1993), p. 155.
[67] Morgan, *Bristol and the Atlantic Trade*, p. 196.
[68] TNA PRO E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2.
See Appendix 4.4.2. For notes on how the figures were converted into lb. see Appendix 2.2.

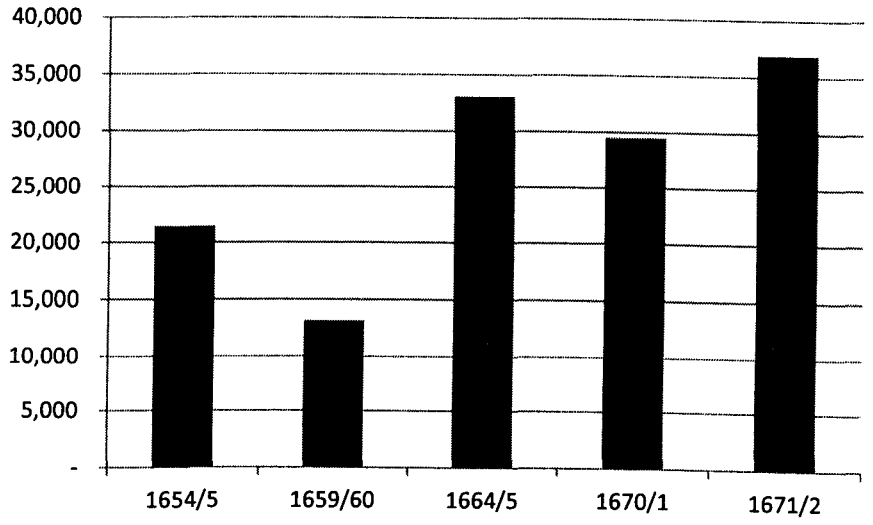

Figure 54 - Bristol's Recorded Sugar Imports, 1654/5-1671/2 (cwt):[69]

A further interesting detail recorded in the Port Books which is not apparent from the less detailed Wharfage accounts is that the vast majority of Bristol's sugar imports were in the form of unprocessed 'Brown' sugar, and so the need to process these imports must have provided a considerable stimulus to industry in Bristol. Indeed, Ramsay has already noted the establishment of new sugar houses in Bristol as imports increased.[70] Tobacco too needed a considerable amount of processing, requiring cutting, bathing, spinning, and rolling before it was ready for consumption.[71] As with sugar, the majority of Bristol's tobacco was imported unprocessed in various sized casks, with only limited amounts from the West Indies coming in as processed rolls, so the increase in imports would have generated much employment in the city.

Exports

Unfortunately very few outbound commodities were recorded in the Wharfage Books, so the 1671/2 Port Book provides the first opportunity to analyse the export side of Bristol's American trade.[72] As Zahedieh has

[69] TNA PRO E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2.
See Appendix 4.4.2. For notes on how the figures were converted into Cwt. see Appendix 2.2 and Appendix 3.1.
[70] Ramsay, *English Overseas Trade*, p. 146.
[71] Zahedieh, *Capital and the Colonies*, p. 202.
[72] Slightly earlier export Port Books do survive from 1661/2 and 1667/8 (TNA PRO E190/1240/6; E190/1137/1), however as they are Searcher's accounts, and thus do not contain the duty paid, it would be much more difficult to extract a useful dataset from them. I am very grateful to Peter

pointed out, many historians have neglected the colonial export trade, focusing instead on the more dramatic changes in the import and re-export trades. England's colonial exports, however, in fact grew at a slightly faster pace than the import side of the trade, so to gain a full understanding of early American commerce it is certainly worth examining the make-up of the exports.[73] Bristol's exports to the Americas were dominated by manufactured goods and foodstuffs, and so would have provided further stimulus to industry and agriculture in Bristol and its hinterland. Although by the Restoration the mainland colonies were increasingly capable of providing their own food, the West Indies were still reliant on outside supplies of provisions.[74] Industry in the colonies, on the other hand, remained relatively underdeveloped, and so the colonists still depended on shipments of manufactured goods from England, including everything from cartwheels to felt hats.[75] Unsurprisingly therefore, a huge variety of goods made up this trade, with no commodities particularly dominant, although the generic label 'wares', which probably consisted of small manufactured goods, accounts for 29 per cent of the total. Indeed the variety is so great that analysing this trade would almost be a study in itself, with one 157 different types of commodity exported (not accounting for those concealed within the 'wares' category), compared to just 62 in Bristol's continental trades.

Although provisions played a significant part, making up just under 10 per cent of American exports, and would have been supplemented with further goods picked up in Ireland, it was manufactures which dominated Bristol's exports to the American colonies (see Figure 55). Manufactured goods contributed just under 79 per cent of Bristol's exports to the Americas, showing a similar pattern to that observed at London where

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Taylor for alerting me to the 1661/2 book as it has been wrongly catalogued, appearing at the end of the Bristol Port Books rather than in chronological sequence, and therefore initially escaped my attention. Unfortunately it came to light too late to be put to any great use in this thesis, although I hope to use it in future research.

[73] Zahedieh, *The Capital and the Colonies*, pp. 238-9.

[74] Zahedieh, *The Capital and the Colonies*, pp. 252-3.

[75] R. Davis, *The Rise of the English Shipping Industry in the 17th and 18th Centuries*, (Newton Abbot, 1972), pp. 268-9.

manufactures accounted for around 90 per cent of colonial exports.[76] Indeed, bearing in mind that the customs valuations of manufactured goods had been significantly reduced to encourage their export, they may have dominated Bristol's American trade to a greater degree than these figures suggest. As has already been stated, more than a third of these manufactured exports consisted of 'wares', an assortment of miscellaneous small manufactures which the customs officers did not enumerate individually. A wide variety of cloths were also included, making up around 18 per cent of American exports, and items of clothing also played a significant part making up 14 per cent of exports to the colonies, with £450 worth of shoes alone representing 8 per cent. Indeed clothing may have been more important than these figures suggest, as there are numerous entries of 'wearing apparel' or 'clothes' which do not record a value, presumably as they were exempt from duty.[77] The remaining £1,100 of manufactures was comprised of a diverse range of goods, including £300 worth of candles; £100 of nails; wrought iron; tobacco pipes; saddles; beds and bolsters; and so on. The presence of a variety of cloths such as 'Norwich stuffs' shows that at least some of these goods were sourced from across the country. It seems likely, however, that the vast majority were sourced in Bristol and its fairly extensive hinterland; this was certainly the case in the eighteenth century.[78] Overall then it is clear that the American colonies were providing a significant new market for Bristol's industries, with artisans from all manner of occupations finding the opportunity to vend their wares overseas. Combined with the need to process the huge volumes of raw tobacco and sugar imported, it is clear that the growth of the American trades was providing a considerable impetus to Bristol's industries in the 1670s.

[76] Zahedieh, *The Capital and the Colonies*, p. 257.
[77] No attempt to ascribe a nominal value to these has been made, as it is impossible to identify exactly what they were, and thus determine an accurate valuation.
[78] Morgan, *Bristol and the Atlantic Trade*, pp. 96-105.

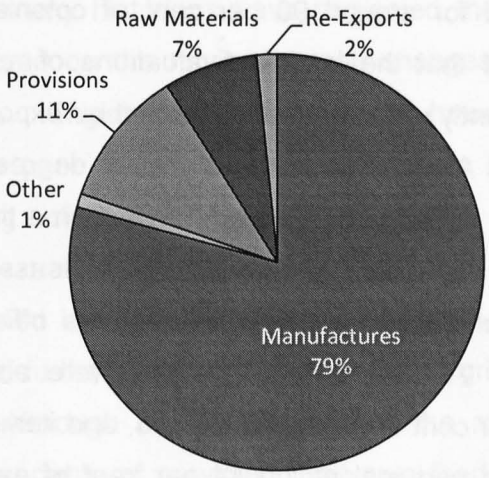

Figure 55 - Bristol's American and West Indian Exports by Commodity, 1671/2 (in pounds sterling):[79]

Clearly the main driving force behind this continuing expansion of Bristol's American trades was the growth of the colonies themselves, as their populations (and thus the market they provided) continued to swell. The population of Virginia, for example, rose from 24,900 in 1660 to 98,100 in 1700, and over the same period the West Indies population grew from 81,000 to 148,000.[80] It may also be the case, however, that this trade was boosted by protectionist legislation which was designed to give English shipping an advantage over their Dutch rivals, establishing a total monopoly on trade with the colonies. There were two principal pieces of legislation in this regard: the Staple Act of 1663 which meant that the colonists were bound to buy almost all English and European goods directly from England; and the Navigation Act which required virtually all colonial produce (including sugar, tobacco, cotton, and dyestuffs) to be sent directly to England in English or colonial ships.[81] The Navigation Act had been in existence since 1651, although during the Interregnum it is unlikely that its enforcement was sufficient to exclude the Dutch from trade with the American colonies.[82] In 1660, however, a new Navigation Act was issued including tighter definition and further measures to ensure

[79] TNA PRO E190/1138/1. See Appendix 4.4.3.
[80] Zahedieh, *The Capital and the Colonies*, p. 33.
[81] Wilson, *England's Apprenticeship*, pp. 163-4.
[82] J. Cooper, 'Social and Economic Policies Under the Commonwealth', in G.E. Aylmer (ed.) *The Interregnum: The Quest for Settlement 1646-1660),* (London, 1972), p. 135.

its enforcement, indeed the 1670s Bristol Port Books include occasional notes with regard to the nationality of a ship and its crew.[83] Although it seems unlikely that total enforcement of these acts was ever possible, it is certainly likely that in the years after the Restoration the combination of the Staple and Navigation Acts would have given English, including Bristol, merchants a considerable advantage and further stimulus in their trade with the rapidly growing American colonies.

The rise of American trade witnessed at Bristol is certainly not unique; as has already been described, the same forces were also driving expansion at London allowing the capital to retain its premier position amongst England's ports.[84] For Bristol, however, it was perhaps more significant, finally allowing the country's second city to make up some ground on the capital. American commerce at London was just one of many expanding avenues, with other long-distance trades such as that of the East India Company also taking off in this period. At Bristol, on the other hand it was the principal driving force of a dramatic transformation that would allow the city to build on its early century prosperity towards its golden years in the eighteenth century.

The Export Gulf

Perplexingly there is a very large deficit between Bristol's exports to the colonies and imports which they received in return. In 1671/2 over £461,000 pounds worth of imports were received from North America and the West Indies, but only £5,600 worth of goods were exported on ships bound for the New World. This may be partly due to the alterations to the customs duties; manufactured goods accounted for as much as 80 per cent of Bristol's exports to the colonies, so the halving of their recorded value could have significantly reduced the apparent value of exports.

The great difference between the value of Bristol's American imports and exports could also be the result of a simple matter of supply and demand.

[83] Wilson, *England's Apprenticeship*, p. 164.
[84] Wilson, *England's Apprenticeship*, pp. 160-1.

The colonies had come to focus exclusively on the production of cash crops so they were completely dependent on English ships to provide for all their basic needs. Although competition between merchants would have kept the price in check to some extent, on the whole this would have led to relatively high prices for goods that were of relatively low value in England.[85] Equally, as a result of transport costs and profit margins, colonial goods could be purchased much more cheaply in the colonies than they were sold for in England. Tobacco, for example, cost little more than 1d. per lb in the colonies for much of the 1670s, but could be sold for around 2s. 2¼d. per lb in England.[86] Even though much of it may have been eaten up in shipping costs, this double increase in value would certainly explain a fairly substantial difference between the recorded values of exports and imports. Unfortunately it has not been possible to find reliable retail prices for English goods in the colonies. However, bearing in mind that the majority of exports to the Americas were manufactures, it seems likely that goods valued at £100 on export would have sold in the colonies for at least £200. At a conservative farm price of 2d. per lb this £200 would buy 24,000 lb of tobacco. The customs valuation for tobacco was 1s. 8d. per lb, so on return to England this tobacco would have been valued in the Port Books at £1,200. Over the course of a single voyage therefore, even using fairly cautious price estimates, this suggests a twelve times increase in value over the initial exports. The reason for the significant deficit between Bristol's recorded exports and imports therefore becomes much clearer.

The Indentured Servant Trade

The export of indentured servants from Bristol, of which Sacks made so much, may also have played some part, although it certainly was not as significant as he suggested.[87] Between 1654 and 1662 less than 3,900 indentured servants left Bristol bound for the colonies, working out at less

[85] Davis, *Rise of the English Shipping Industry*, p. 269.
[86] Sacks, *Widening Gate*, pp. 284-5; Rogers, *History of Agriculture and Prices*, pp. 467-8.
[87] Sacks, *Widening Gate*, pp. 251-277.

than 330 a year on average.[88] Even though this seems like a high number of people, it pales into insign ificance compared to the 3,705 slaves delivered to Barbados by the London based Company of Royal Adventurers to Africa in the seven months before August 1663.[89]

Although the *Register of Servants* d oes provide a detailed record of Bristol's Indentured servant exports, they were not recorded in the Port Books and thus have not been considered alongside Bristol's other exports in this study. The *Register* also gives no indication of the financial value of these servants, so a price must be added separately. It has not been possible to find a price from Bristol, although it certainly seems unlikely that the price for indentured servants in the 1670s would have exceeded the £20 fine imposed on shipmasters who received unauthorised persons on their vessels as bound servants.[90] If the price had been higher than £20 this fine would not have been considered a sufficient disincentive. Other figures suggest that it would cost something in the region of £12 to buy a male indentured servant in the colonies. The price in Bristol, however, is likely to have been substantially lower than this, as the cost of passage alone amounted to around £5. Indeed figures from London suggest that those wishing to export indentured servants would pay as little as £2 per head to the agent who sourced them.[91] It may have been that the price in Bristol was slightly higher than that in London, or that the merchant's own valuation of the servants was slightly higher than the fee which they paid to the agents who acquired them. Even taking this into account, however, it seems unlikely that this nominal value of £2 is far out of line with the values ascribed to Bristol's other American exports by the Book of Rates. It must, after all, be borne in mind that the Book of Rates valuations were often significantly lower than the actual value of the goods. They both tended to lag behind current wholesale prices, and also in many cases had been deliberately reduced

[88] D. Souden, '"Rogues, whores and vagabonds?" Indentured servant emigrants to North America, and the case of mid- seventeenth-century Bristol', *Social History*, volume 3 no.1 (1978), p. 37.
[89] K.G. Davies, *The Royal African* Company, (London, 1957), pp. 42-3.
[90] C.M. MacInnes, *Bristol: A Gateway of Empire*, (Newton Abbot, 1968), p. 161.
[91] Zahedieh, *Capital and the Colonies*, p. 244.

to encourage the export of the manufactured goods which made up the vast majority of Bristol's exports to the Americas.

Taking a nominal price of around £2 per servant, in 1671/2 when 206 indentured servants were 'exported' their equivalent value was around £400. This was considerably less than the £5,600 worth of exports to the colonies recorded in the Port Books. This certainly suggests that the trade in indentured servants, while not insignificant, was far from being as important as Sacks has suggested, making up as little as 7 per cent of the value of Bristol's exports to the American colonies in 1671/2. It is also questionable whether this export could ever really be seen as a regular and organised trade; more than a thousand different masters were recorded sending servants between 1654 and 1660, and of these only thirteen sent more than 20.[92] In spite of the importance which Sacks attached to it, it thus seems that this 'export' of indentured servants only ever made up a relatively small part of Bristol's trade to the Americas, forming a mere sideline to Bristol's regular trade focused on supplying the colonies need for provisions and manufactures. It also proved relatively short-lived; even Sacks admitted that it was in serious decline by the 1670s, with numbers in 1678 already 50 per cent below their peak.[93]

Irish Provisions

A further possibility is that some ships stopped off in Ireland to fill up on provisions which they would then take on to the American colonies.[94] A number of ships do list their destination as both Ireland and North America, although this is a relatively rare occurrence, and it may be that others just recorded the initial destination in Ireland or indeed left in ballast.[95] On a number of occasions different consignments loaded onto a ship give different destinations. Even though the pool of ship names was relatively small, these can definitely be identified as a single ship bound for multiple destinations rather than several ships as the master's

[92] Souden, '"Rogues, whores and vagabonds?"', p. 35.
[93] Sacks, *Widening Gate*, p. 279.
[94] Davis, *Rise of the English Shipping Industry,* p. 269.
[95] TNA PRO E190/1138/1, ff. 27r, 112r, 122r, 126v.

name remains the same. The exact reasons for this are unclear, in all probability it was simply lazy entry, as the destination was not especially important for tax purposes. It therefore appears that of the 28 ships bound for North America 4 also say they were going to Ireland (14 per cent), and of 31 ships headed to the West Indies 7 (23 per cent) also appear to have been bound for ports in Ireland. Overall this shows that of 59 ships bound for the American colonies, at least 11 (19 per cent) were also stopping off in Ireland; indicating that export of provisions from Ireland could have made up a substantial proportion of the apparent deficit between colonial imports and exports. Further evidence that such stop-offs in Ireland occurred comes from the Bristol *Deposition Books* (see pp.133-134), a collection of sworn statements of events made by individuals in front of a magistrate, in the event that they may later be needed in legal proceedings. The *Love's Increase*, for example was found to be leaking very badly during a voyage from Bristol to Ireland and the West Indies, and Edward Yeamans made a loan to some of the crew of the *Mayflower* of Bristol during a voyage from Bristol to Ireland and St. Sebastians.[96]

A final possibility, which unfortunately must remain largely speculative, is that an increasing proportion of trade was being made up by multi-part voyages, of which the Port Books provide little evidence, including, possibly, an embryonic triangular trade. The likelihood of this will be examined in more detail in the following section.

Multi-Part Voyages

Potential Involvement in the Slave Trade

There has been much speculation about whether Bristol engaged in the transatlantic slave trade prior to its official entry with the end of the Royal African Company's monopoly in 1698. MacInnes, was in little doubt that Bristol was involved, indeed heavily involved, in the triangular slave trade

[96] P.V. McGrath, 'Merchant Shipping in the Seventeenth Century: The Evidence of the Bristol Deposition Books, Part I', *Mariners Mirror*, vol. XL (1954), p. 293; McGrath, 'Merchant Shipping Part II', *Mariners Mirror,* vol. XLI (1955), p. 29.

well before the ending of the monopoly. He suggested that after the Restoration 'Bristol threw itself with great energy into the slave trade' and 'steadily developed its connection with Africa throughout the remainder of the century'.[97] Exactly what his evidence was, however, is far from clear as he provided no references to back up this assertion. Nonetheless, he clearly still held these opinions in 1955 when he wrote that: 'her ships in growing numbers frequented the Bight of Benin' after the creation of the African monopolies.[98] McGrath, on the other hand, was much more cautious, suggesting that 'it seems doubtful... whether the trade was of any great importance until after 1698'. Although he highlighted one example of a ship that was seized in 1688, he also pointed out that no Bristol ships appear in the Royal African Company's register of ships seized for trying to trade illegally.[99] Madge Dresser was also fairly cautious about Bristol's involvement during the monopoly years, although she suggested that: 'it seems reasonable to suppose that some Bristolians were involved in this illicit commerce'.[100] As well as highlighting Bristol connections in the Caribbean which could have aided this trade, she identified several examples of ships seized for trading in slaves, and an example of three ships bound for Madeira in 1679 with cargos that look much more like those of the African trade.

There is certainly much evidence that English merchants did interlope into the Royal African Company's monopoly. For example in 1679 an agent of the company at Cape Coast reported that four interlopers had sailed past in a single day, and in 1682 the Governor of Jamaica was informed that there were no fewer than 70 interloping vessels on the African coast.[101] Although there is no evidence as to whether any of these ships originated in the provincial ports, let alone Bristol, it would certainly seem a strong possibility, especially bearing in mind Bristol's

[97] C.M. MacInnes, *England and Slavery,* (Bristol, 1934), p. 27.
[98] MacInnes, 'Bristol and Overseas Expansion', in C.M. MacInnes and W,F. Wittard (eds.) *Bristol and its Adjoining Counties,* (Bristol, 1955), p. 227.
[99] McGrath, *Merchants and Merchandise*, p. xxii.
[100] M. Dresser, *Slavery Obscured: The Social History of the Slave Trade in an English Provincial Port*, (London, 2001), pp. 13-15.
[101] Davies, *Royal African Company*, p. 113.

heavy involvement in trade with the American colonies, to which slave trading formed a natural adjunct. The risks involved were also relatively low, the never-ending demand for labour meant that there would always be a ready market for slaves in the colonies, whether they were imported under the monopoly or not; and as Dresser has pointed out, the large numbers of Bristol men in the colonies would have formed a ready-made network to aid their sale and prevent prosecution.[102]

As with other forms of illicit commerce, voyages interloping into the triangular trade leave very little impression on the official sources. Naturally the African destination would not be declared in the Port Books, and merchants may even have attempted to conceal suspicious looking export goods, as ships could be seized by the Royal African Company even before they had left England.[103] There are, however, still a few traces left in the Port Books which may hint at Bristol's involvement in this trade. Perhaps most intriguing is definite evidence of Bristol trading with Africa; as has been discussed in Chapter 2 (see p. 96), Bristol merchants had visited Africa well before the seventeenth century, with ships bound for Barbary and Guinea recorded in the Port Books.

In 1671/2 there is a curious example, with £2,200 (7 per cent of all exports) worth of goods being listed as bound for Tangier in Morocco, although no ships are recorded as having returned from there in either 1670/1 or 1671/2. Closer examination of the four ships involved in fact reveals that they also listed a variety of other destinations in Spain and the Mediterranean, and were in fact carrying £5,200 worth of goods (17 per cent of Bristol's exports). This clearly shows that Bristol merchants were interested in trading to Africa, although Tangier lay outside of the area of the Royal African Company's monopoly. The intriguing possibility also remains that this was simply the merchants declaring a false destination to conceal the fact that the ships were, in fact, bound for the protected area, and then on to the Americas; this would certainly explain

[102] Dresser, *Slavery Obscured*, pp. 15-23.
[103] Davies, *Royal African Company*, pp. 98, 115.

the variety of different destinations given for the same ship (with one merchant giving different destinations on three separate consignments). The more likely possibility, however, is that the ships were simply going on a multi-part voyage that would take in Tangier and Spanish ports before heading deeper into the Mediterranean. Examination of the Wharfage Books shows that three ships with the same names returned the following year carrying goods that were clearly from the continent such as olive oil and dried fruits (by this stage the port of origin was only rarely recorded).[104] The decay in the quality of the Wharfage Books data means that details such as the name of the master and the tonnage of the ship which would allow a more firm identification were not recorded, however, it is fairly certain that these were the same ships. It seems more than likely, therefore, that the majority of these Tangier bound vessels were merely an extension of Bristol's continental trade, rather than a cover for illicit slaving voyages.

One ship, however, remains an anomaly. The *Nevis Adventure* appears in the Port Books for one day in July 1672 loading goods for Tangier and Malaga. Its name alone would suggest that it was principally intended for West Indian trade, and the fact that it loaded only £83 worth of declared goods despite its 100 ton size seems even more peculiar. It may have been the case that this remaining capacity was taken up by conspicuously 'African' goods which were not declared to avoid the risk of seizure. Attempts to trace the return of this ship using the Wharfage Books have proved completely fruitless, where it is not recorded as having returned by the end of 1673. Perhaps the most likely explanations are that the ship was lost at some point in the voyage, or returned to a port other than Bristol, although it is also possible that it was engaged on a longer voyage to Africa then on to the Americas before returning home.

One of the Madeira bound ships which Dresser identified as looking suspicious in 1675 also appears in the export side of the 1671/2 Port

[104] BRO SMV/7/1/1/5.

Book. The intriguingly named *Blackmore* was once again declared as being bound for Madeira, carrying an assorted cargo of cloth and other wares which certainly could equally have found a market on the Slave Coast.[105] More interestingly, however, she returned to Bristol on the 7th of July 1673 carrying a cargo of tobacco which almost certainly indicated that she had come from the American colonies.[106] Although declaring Madeira as a destination certainly was a tactic used to cover up an illicit African voyage, this does not, however, necessarily mean that this was true in the case of the *Blackmore*. It was in fact fairly common practice for ships to genuinely stop at Madeira en-route to the American colonies, both to re-supply, and to pick up a cargo of wine (as Madeira Wine had a specific exemption from the Staple Act which required all goods bound for the colonies to be loaded in England). Indeed in 1686 at least forty ships called at Madeira on their way to the colonies, and it has been estimated that as much as 80 per cent of wine consumed in the colonies originated in the Atlantic Islands.[107] The identity of the merchants shipping goods on the *Blackmore* also possibly suggests that this was not a slaving voyage. Comparison with other records has shown that the majority of those involved were Quakers, and therefore likely to be opposed to slave trading on religious grounds. In 1676 the noted Quaker (and close acquaintance of many of the Bristol Friends) George Fox published a pamphlet in which he said:

> '...if you were in the same condition as the Blacks are...now I say, if this should be the condition of you and yours, you would think it hard measure, yea, and very great Bondage and Cruelty. And therefore consider seriously of this, and do you for and to them, as you would willingly have them or any other to do unto you...were you in the like slavish condition.'[108]

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[105] TNA PRO E190/1138/1, ff. 114r-116r.
[106] BRO SMV/7/1/1/5.
[107] Zahedieh, *The Capital and the Colonies*, pp. 254-5.
[108] G. Fox, *Gospel Family-Order, Being a Short Discourse Concerning the Ordering of Families, Both of Whites, Blacks and Indians*, (1676).

The exports on the *Blackmore* were declared in the names of three individuals: William Yeamans, John Speed, and Harculas Hodges, with Yeamans accounting for the vast majority. On the return voyage both Yeamans and Speed again declared goods, and they were joined by John Speed's brother Thomas as well as a Thomas Gouldney. It is well attested that the Speed family were Quakers,[109] as was the grocer Thomas Gouldney who was imprisoned three times for his faith.[110] Hodges has proved impossible to trace and this is his only recorded shipment, possibly implying he was a mariner conducting a limited amount of trade in his own name. William Yeamans is also difficult to trace, as two related merchants of the same name were active in Bristol in the early 1670s. One was certainly a leading member of the Quaker community, and indeed married the stepdaughter of George Fox, but a discussion with Jonathan Harlow has suggested that the William Yeamans involved in this voyage is likely to be the older of the two who, although probably not a Quaker, was a regular trading partner of John Speed.

On the whole it seems improbable that Bristol merchants were not already involved in triangular slaving voyages to some extent at least by the 1670s, although it seems highly unlikely that this was on anything like the scale suggested by MacInnes. It must, after all, be borne in mind that even in the years after the lifting of the monopoly Bristol's involvement in the slave trade was only on a relatively modest scale. Richardson's great survey of every slaving ship leaving Bristol reveals only two recorded voyages in both 1698 and 1699, only three in 1700 and 1702 and four in 1701.[111] These relatively modest beginnings, combined with the lack of conclusive evidence for more than a handful of pre-1698 voyages, would certainly suggest that Bristol was not involved in the slave trade to any great extent before the monopoly was lifted.

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[109] Harlow, 'Life and Times of Thomas Speed'.
[110] R. Mortimer (ed.), *Minute Book of the Men's Meeting of the Society of Friends in Bristol 1667-1686,* Bristol Records Society vol. XXVI (1971), p. 201.
[111] D. Richardson, *Bristol, Africa, and the Eighteenth Century Slave Trade to America, vol. 1 The Years of Expansion 1698-1729*, Bristol Records Society vol. XXXVIII (1986), pp. 1-5.

Newfoundland Sack Trade

One triangular trade which Bristol's merchants were certainly involved in during the post-Restoration years is that between England, Newfoundland and southern Europe. English ships had been travelling to the Newfoundland Banks in search of fish (cod) since the sixteenth century, and indeed this was the only aspect of North America which had attracted any sustained interest from Bristol's merchants prior to the Civil War. In addition to being in great demand in England, these fish, preserved by salting and drying on massive racks or flakes, found a considerable market in southern Europe. Fish was particularly in demand in the Iberian Peninsula, where the continuing strength of Catholicism meant that it was much in demand for consumption on days when the eating of meat was not permitted. This led to the evolution of a triangular trade, where ships would leave England either in ballast, or carrying a few essential supplies for the colonies; pick up a cargo of fish from the Newfoundland Banks, either by fishing or from a fishing master in Newfoundland; sell this cargo in Spain and bring back Spanish wines (leading to this route sometimes being described as the Newfoundland sack trade) and dried fruits for sale in England.

Unfortunately trade between Newfoundland and the Iberian Peninsula is virtually impossible to track using the Port Books. Ships going out to Newfoundland tended to leave in ballast and are thus not recorded in the customs records; and on their return only their immediate port of origin in southern Europe is listed, not their previous ports of call. Unlike the produce of the colonies in the West Indies and Virginia, Newfoundland fish was not bound by the Navigation Acts to be exported only to England, so was usually shipped straight to its end markets, rather than first being bought back to Bristol. The 1671/2 Port Book shows only one ship bound for Newfoundland, the *Expe riment* which left in mid-June carrying a variety of provisions.[112] Only one ship also appears to have returned from the Banks that year (the *John* carrying train oil and tallow)

[112] PRO E190/1138/1, ff. 80r-80v.

and only three were recorded in the previous year's Port Book.[113] Evidence from Newfoundland, however, shows that in 1675 as many as 9 Bristol ships (averaging 59 tons in size) in fact visited Newfoundland, all of which were bound directly for markets in southern Europe.[114] It seems, therefore, that this hidden trade may have made a fairly significant contribution to Bristol's overseas commerce in the mid- to late seventeenth century, although interestingly Bristol was not as heavily involved as many smaller west coast ports. Dartmouth, for example, sent 41 ships to Newfoundland that year, and Bideford sent 25; in all 174 ships were recorded, of which Bristol only contributed a little over 9 per cent.[115]

Other Multi-Part Voyages

It is also likely that Bristol ships were engaged in other multi-part voyages, possibly including carrying trade between ports which would have further increased their profits during the time they were away from Bristol. Few sources have emerged to show whether Bristol ships were engaged in such carrying trades; however, it seems highly likely that they would have done so to at least some extent. Perhaps some hint of this practice comes from ships declaring multiple destinations in the Port Books when they left Bristol. This type of activity was probably more important in Bristol's continental and Mediterranean trades, although interestingly 5 ships bound for the North American colonies in 1671/2 also at times give ports in the West Indies as their destination, suggesting that some carrying trade between the colonies may also have occurred. The profits made by Bristol's merchant ship owners from these ventures would eventually have been brought home in the form of imports for sale in England. This, therefore, helps to explain the gap between imports and exports, although naturally none of these activities would be recorded in the Port Books which only record the immediate port of origin of returning ships.

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[113] PRO E190/1137/3, ff. 35, 85v-87r; E190/1138/1, ff. 145v-146r.
[114] P.E. Pope, *Fish into Wine: The Newfoundland Plantation in the Seventeenth Century*, (London, 2004), p. 111.
[115] Pope, *Fish into Wine*, p. 111.

The increased prevalence of complex multi-part voyages means that the Port Books for the period after the Restoration increasingly give clues towards the nature of Bristol's trade, rather than presenting a complete picture of it. Combined with the increased incidence of smuggling, and the alterations to the customs valuations, this certainly makes the job of the trade historian a much more complicated one for the latter part of the seventeenth century. The Port Books were, after all, created entirely as tax records, not to provide economic historians, or indeed people at the time, with a detailed picture of England's trade. They can still, however, give us a very good indication of the broad trends of trade, and by combining them with other sources it is still possible to get a very good impression of the complete trading system.

The increased prevalence of multi-part voyages, such as the Newfoundland sack trade or the African triangular trade, helps to explain the large discrepancy between the value of imports and exports listed in the Port Books. While on the surface this may suggest a massive trade imbalance, it in fact reflects the costs of conducting these complex voyages which involved keeping the ships at sea for long periods of time. It is also worth noting that this imbalance does not mean that Bristol's trade was totally import dominated, with exports fulfilling a relatively unimportant role. Although lower in bulk than the return cargoes, the reliance of the colonists on English manufactures meant that merchants could also make a profit on their exports. The trade was therefore in fact relatively evenly balanced, with exports as well as imports playing an important role.[116]

Conclusions

Although not quite as striking as the growth seen during the Interregnum, the period between the Restoration of the monarchy and the Glorious Revolution still saw Bristol's overseas trade undergo some significant

[116] Davis, *Rise of the English Shipping Industry*, p. 269.

developments. By far the most important of these was the continued growth of the American and West Indian trades. Even though they were clearly boosted by war with the Dutch in some years, these had both continued to increase in scale since the 1650s, firmly establishing their dominance over Bristol's commercial world. The great advantage of using the Port Books rather than the Wharfage Books to examine Bristol's trade is the greater reliability and breadth of data which they provide. In particular the renewed availability of export data is significant, as for the first time it permits us to see both sides of the American trades, and the beneficial impact which this would have had on Bristol's industries. To an extent perhaps customs records had by this stage become a less adequate measure of Bristol's trade as a whole, as both meddling with the Book of Rates and the increased prevalence of 'hidden' voyages make them harder to interpret. Nonetheless, since they are the only surviving quantitative source that can provide an overview of any part of Bristol's trade, the Port Books should still form the foundation of any analysis of Bristol's trade at this time. In the absence of a more complete source it would be rash not to employ the Port Books, and this study by combining them with other records has given us a more complete picture than ever before of the state of Bristol's trade in the post-Restoration years that saw it begin its ascent to the glory years of the eighteenth century.

Chapter 5:

The Old World Trades, 1642-1689

Without question the defining feature of Bristol's commerce in the years between the Civil War and the Glorious Revolution was the spectacular growth of trade with the American colonies. In the first four decades of the seventeenth century Bristol's trade had followed much the same pattern as it had done for the past three hundred years, but, as the previous two chapters have shown, by the end of the century the emergence of the transatlantic routes had brought Bristol's commerce into a completely new era. However, the increasing dominance of the American connections does not mean that Bristol's traditional trades to France, Ireland, and the Iberian Peninsula faded into obscurity. Compared to the more eye-catching developments across the Atlantic in the second half of the seventeenth century, Bristol's European trades have received relatively scant attention from previous historians. This neglect perhaps seems a little remiss. In the years before the Civil War, the prosperity of trade with Bristol's traditional markets had been sufficient to drive a considerable increase in both imports and exports. This final chapter, therefore, will investigate how Bristol's 'old' trades fared in the second half of the seventeenth century, considering whether they were swamped by the emergence of the new American voyages, or whether they managed to maintain some of their early-century prosperity.

This chapter will open by considering the methodological challenges in examining Bristol's traditional trades in the second half of the seventeenth century, in particular focusing on the likely impact of smuggling. The work of previous historians will then be briefly outlined, including the limited consideration given to Bristol's European trade during these years

as well as recognised national trends. The data for French, Iberian, and Irish trades will then be considered in detail, tracing their on-going development between the Civil War and the Glorious Revolution and seeking explanations for the trends observed. Finally, the opportunities for Bristol merchants to become involved in new trades other than the Americas will be examined, considering why they did not exploit these openings to a greater extent.

Methodological Challenges

The methodology, and hence also the areas of difficulty, are the same as those in the previous two chapters. The analysis is principally based on five sets of accounts: Wharfage Books from 1654/5, 1659/60, and 1664/5; and Port Books from 1670/1 and 1671/2. Unfortunately only the 1671/2 Port Book contains any significant record of Bristol's exports, and the import data from the 1664/5 Wharfage Book needs to be treated with a little more caution as it did not record the port of origin. The two major difficulties in the interpretation of the data from these accounts are the same as those discussed in the previous chapter: potential distortion from alterations to the customs rates, and the impact of smuggling.

As discussed previously, the customs valuations contained in the Book of Rates were revised significantly upwards during the Civil War and Interregnum. Although the rate of increase was not uniform, it is possible to undertake a comparison with figures from earlier in the century by simply doubling any figures from before 1642. In line with this increase, the nominal values for goods which did not pay poundage have also been adjusted. After 1642, wine is valued at £16 the ton, broadcloth at £9 the cloth, and leather at £4.50 the dicker. The exception to this, however, as will be discussed below, is the Irish trade, where there were only minimal revisions of the valuations. The situation with exports is a little more complicated, as in an attempt to stimulate the domestic economy exports of manufactured goods had their valuations halved, while raw material exports saw their duties increased significantly. Post-Civil War export figures, therefore, need to be analysed with great caution.

In terms of the European trades, possibly the most difficult factor to account for is the impact of smuggling. The effective ending of monopolies means that Bristol's merchants are unlikely to have been illegally interloping into protected trades in the years after the Civil War. Equally the abolition of prohibitions on the export of agricultural goods, combined with the low rate of duty on manufactured exports means that export smuggling is likely to have been minimal. Imports from Ireland were subject to only a low rate of tax, so smuggling in that branch of trade is likely to have been negligible. It is, therefore, imports of highly taxed goods such as wine from France and the Iberian Peninsula where smuggling is most likely to have occurred. As was discussed in the previous chapter, French trade in particular was singled out for prohibitively high rates of duty as the English government strove to limit the economic development of its closest rival. This concern is borne out by William Culliford's report on the Bristol customs service in the 1680s. Culliford found that corruption was rife amongst the Bristol customs officers, and that, while the main focus was on the tobacco trade, considerable quantities of continental linen cloth and luxury commodities were also smuggled.[1]

Previous Approaches

National

Naturally the focus of trade historians for the period after the Civil War has fallen mostly on the rapid development of new long-distance trades such as those to the American colonies. They have, however, also discussed closely-related developments in England's European trades, as the rise of these long-distance routes also gave significant new impetus to continental commerce, particularly in relation to re-exports. Although the growing consumer culture in England soaked up ever increasing quantities of exotic luxuries, the volume of goods imported

[1] W.B. Stephens, *The Seventeenth Century Customs Service Surveyed: William Culliford's Investigation of the Western Ports, 1682-84*, (Farnham, 2012), p. 47.

from the colonies and India far exceeded domestic demand. Considerable quantities of raw materials, foodstuffs, tobacco and Indian textiles were, therefore, re-exported to markets on the continent. The rise of this re-export trade significantly altered the character of England's dealings with continental Europe, which for several centuries had been dominated by exports of woollen cloth. By the end of the century re-exports accounted for as much as a third of all exports, earning England the label: 'the World's Entrepôt'.[2]

Bristol

In comparison to the development of the American trades, for the second half of the seventeenth century Bristol's traditional trades have received relatively little attention from previous writers. Sacks' focus for the latter part of the century was increasingly shifting towards the social implications of trade, so he had little to say about the development of trade itself. He did, however, suggest that in the 1650s the city's merchant elites remained largely focused on the continental trades, with the main impetus in colonial trades coming from people in other occupations.[3]

In the years after the Civil War Ramsay felt that 'beyond the ancient pattern of traffic to France, Spain, Ireland and Newfoundland, a new commercial network was taking shape, and in it Bristol had found a place as a major emporium of Atlantic trade'.[4] Although he clearly saw the American trades as the driving force behind this newfound prosperity, Ramsay nonetheless felt that Bristol's European trades also shared in this upturn in fortunes. In the years after 1653 he suggested that Bristol benefitted from the revived fortunes of Anglo-Portuguese trade, and he also commented on the considerable quantities of manufactures which were being sent from Bristol to a variety of destinations in both the Old

[2] R. Davis, *A Commercial Revolution: English Overseas Trade in the Seventeenth and Eighteenth Centuries*, (London, 1957), p.4; C. Wilson, *England's Apprenticeship 1603-1763*, (London, 1984), p. 161.
[3] D.H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy 1450-1700*, (Berkley, 1991), p. 156.
[4] G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence*, (London, 1957), p. 146.

World and the New.[5] In particular he discussed the triangular trade taking in Newfoundland and south-western Europe, suggesting that two dozen or more Bristol merchants were involved, and that they paid more than £40,000 a year in customs on their imports of oil, wine, fruit, and other commodities.[6] In general, however, Ramsay provided few statistics to back up his arguments. He did briefly examine the 1668 export Port Book, but only gained a very general impression of Bristol's trade from this.[7]

McGrath too had relatively little to say about Bristol's traditional trades. He did suggest that in the 1650s and beyond 'the older trades were growing', but did not really elaborate on this point.[8] His shipping figures indicated that as late as 1686-7 the traditional trades accounted for as much as 55 per cent of all ships leaving Bristol. This included 60 bound for Ireland, 47 for France, and 25 for Spain, compared to 70 heading to the American colonies.[9] As has been remarked in the previous chapter, however, since they take no account of the size of the ships, or the relative value of the goods they carried, simple totals of ships entering and leaving the port cannot be depended on for measuring trade. A fuller investigation of the Port Book and Wharfage Book data is therefore needed to gain a more detailed impression of the fate of Bristol's traditional trades in the second half of the seventeenth century.

French Trade

Of all of Bristol's traditional trades, that with France is possibly the most difficult to examine in the years after the Civil War. On the surface the customs statistics suggest a significant decline, although to an extent this may have been countered by the development of illicit trade in French goods. The Wharfage Books show Bristol's French trade to have fared

[5] Ramsay, *English Overseas Trade,* pp. 144, 146-8.
[6] Ramsay, *English Overseas Trade,* p. 148.
[7] Ramsay, *English Overseas Trade*, p. 148.
[8] P.V. McGrath (ed.), *Merchants and Merchandise in Seventeenth Century Bristol*, Bristol Record Society vol. XIX (1955), p. xix.
[9] P.V. McGrath, *The Merchant Venturers of Bristol: A History of the Society of Merchant Venturers of the City of Bristol from its origin to the present day*, (Bristol, 1975), p. 38.

very badly during the Interregnum. Trade with France had been prospering in the first four decades of the seventeenth century, but in 1654/5 Bristol's French imports totalled just £11,250, less than a third of their level in 1637/8 (see Figure 56). At £13,500, French imports were a little better in 1659/60, although still well short of their pre-Civil War levels. It must also be borne in mind that these figures need to be adjusted to account for changes to the customs rates. Imports from France were particularly targeted with duty increases, so in reality French trade had perhaps declined to a sixth of its 1630s level. It is, however, the French contribution to Bristol's total recorded imports which shows the greatest change. France had been one of the bastions of Bristol's commercial world for more than three centuries, and as late as 1637/8 still made up 35 per cent of Bristol's imports. By 1654/5, however, just 4 per cent of goods imported into Bristol came from France, and at 5.5 percent they still played a fairly minor part in 1659/60 (see Figure 57).

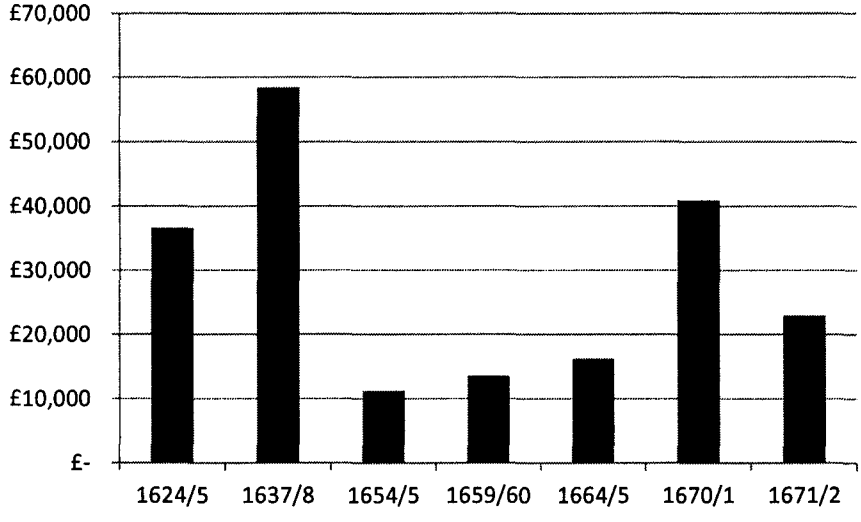

Figure 56 - Bristol's French Imports as Recorded in the Port Books and Wharfage Books, 1624/5-1671/2:[10]

[10] Sources: Sacks, *Widening Gate*, pp. 42-3; TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV7/1/1/2. See Appendix 4.3.1. Figures prior to 1654/5 have been doubled to account for increases in the customs valuations.

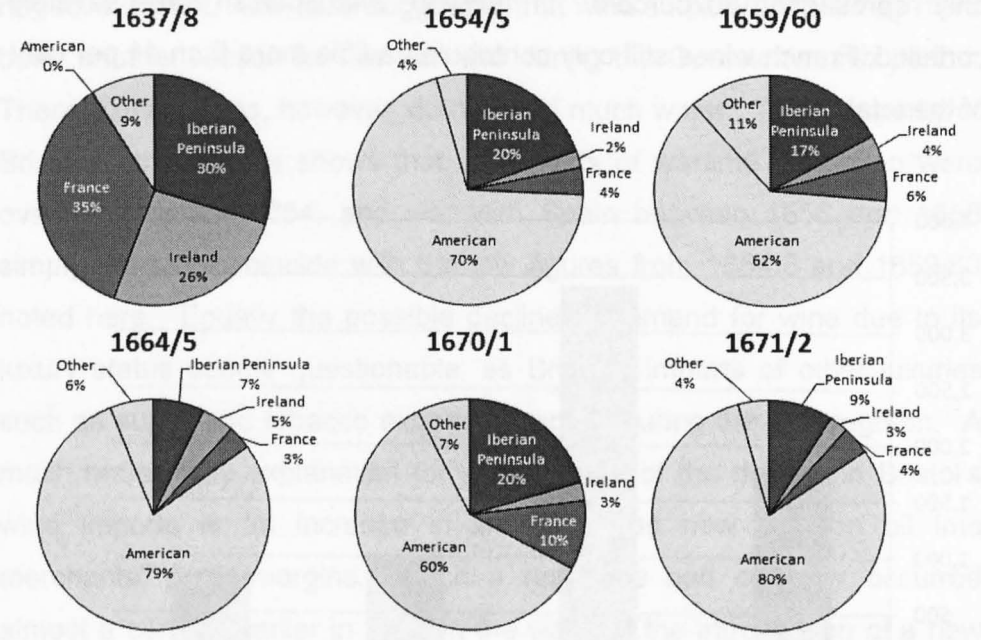

Figure 57 - Bristol's Imports by Country of Origin as Recorded in the Port Books and Wharfage Books (Traditional Trades), 1637/8-1671/2 (in pounds sterling):[11]

The reasons for such a significant drop off in French trade over the course of less than twenty years are a little perplexing. Although the Interregnum saw England at war with the Dutch and the Spanish, there was no such outright confrontation with the French which would explain a cessation of trade. It may also be the case that 1637/8 was an exceptionally prosperous year for French imports, and thus not a suitable base for comparison. When compa red to French imports in 1624/5, however, the 1650s figures still represent a considerable decline. The most obvious cause suggested by the statistics is a marked decrease in Bristol's wine trade (see Figure 58). By 1654/5 Bristol's wine imports had slumped to little more than 1,000 tons, less than a third of their level in 1637/8 and still considerably down on the 1620s. By 1659/60 they had fallen even further to less than 850 tons. French wines were also beginning to make up a much smaller proportion of Bristol's total wine imports (see Figure 59). Even by 1637/8 French wines were no longer dominant, making up only a little more than half of the total imported into Bristol, but by 1654/5 the decline is readily apparent, with French wines

[11]TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 4.3.1.

only representing 23 percent. In 1659/60, with Spanish trade severely curtailed, French wines still only contributed a little more than 41 per cent of the total.

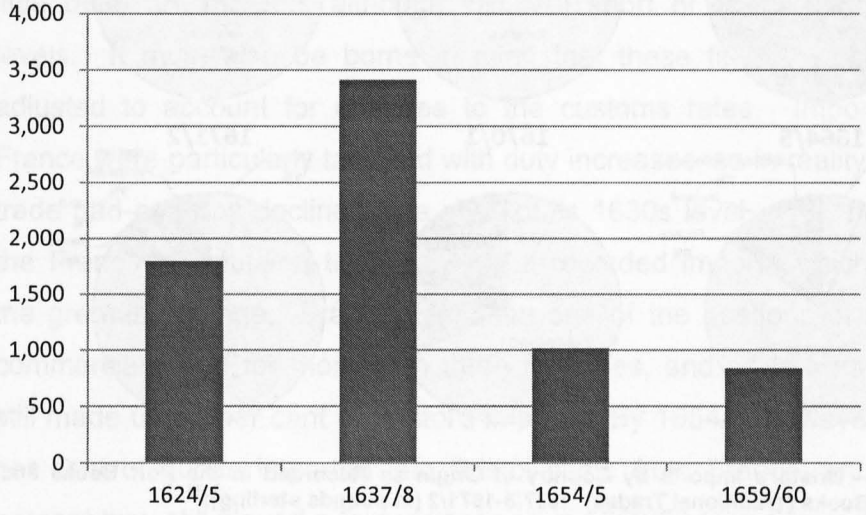

Figure 58 – Bristol's Wine Imports (tons), 1624/5-1659/60: [12]

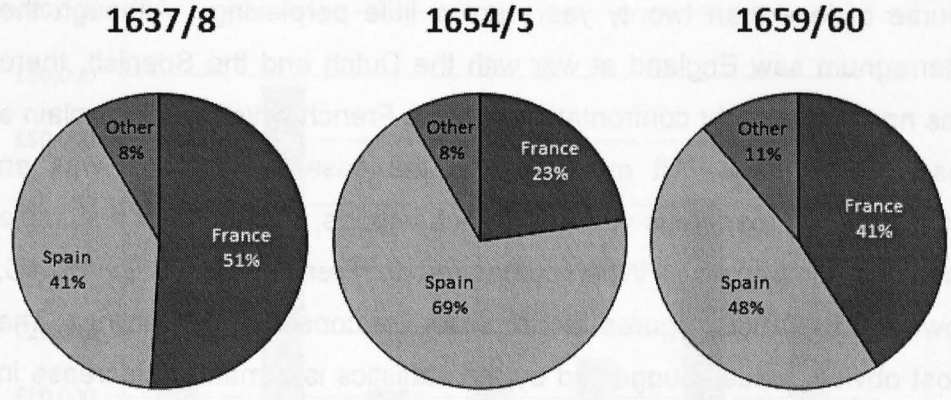

Figure 59 – Bristol's Wine Imports by Country of Origin, 1637/8-1659/60 (tons): [13]

The mid-century drop off in Bristol's wine trade was also noted by Crawford.[14] In part she suggested that wartime troubles were responsible for this decline, with both disruption of the inland trade and risks to shipping during the Civil War and, from 1656, the war with Spain having a

[12] TNA PRO E190/1135/6; E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 5.1.1. For notes on how the figures were converted into tons see Appendix 2.2.
[13] TNA PRO E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 5.1.2. Wine imports measured in tons.
[14] A. Crawford, *Bristol and the Wine Trade*, (Bristol, 1984), p. 17.

negative impact. She also suggested that wine's luxury status may have been another reason for low demand during the Commonwealth period. These explanations, however, do not hold much water. The prosperity of Bristol's other trades shows that the effects of wartime disruption were over long before 1654, and war with Spain between 1656 and 1658 simply does not coincide with the low figures from 1654/5 and 1659/60 noted here. Equally the possible decline in demand for wine due to its luxury status seems questionable, as Bristol's imports of other luxuries such as sugar and tobacco expanded rapidly during the Interregnum. A much more likely explanation for at least part of the decline in Bristol's wine imports is an increase in smuggling as new taxation bit into merchants' profit margins. Such a response had certainly occurred almost a century earlier in 1558 in the wake of the introduction of a new imposition on wine.[15] The notorious Excise duty was introduced in 1643 and wine, initially at least, was subject to this, with the first retailer paying a duty of £6 per ton.[16] By 1645 it is clear that the authorities believed that the Excise duty was leading to an increase in smuggling (although the wartime breakdown of central authority probably exaggerated this problem) introducing an 'ordinance to prevent fraudulent entries of excisable commodities' on the 15th of February. This suggests:

> 'that it is a constant practice of divers Merchants, Importers, and others to remove from the ships, and other vessels, wherein such goods are first imported, into other Ships, Hoys, Barques, Lighters, or other vessels, all sorts of excisable Goods, Merchandises, Wares, and Commodities whatsoever, carrying them beyond the Seas, to the Coasts, Port Towns, Creeks, or other Bye places whatsoever, without making entry thereof at the Excise-office.'[17]

It also describes merchants declaring short measure on their excised imports, or claiming that they had been forced to dispose of their goods

[15] E.T. Jones, *Inside the Illicit economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol*, (Farnham, 2012), pp. 193-4.
[16] C.S. Firth and R.S. Rait (eds.), *Acts and Ordinances of the Interregnum*, (London, 1911), vol. I p. 208.
[17] Firth and Rait, *Acts and Ordinances*, vol. I pp. 626-7.

rather than sell them to avoid payment of duty. Clearly increased smuggling was perceived to be a considerable problem, so it seems likely, at least in part, that the drop in Bristol's recorded wine imports represents a shift to contraband cargoes rather than a genuine fall in trade.

A further significant explanation for the decline of Bristol's recorded French trade is the introduction of embargoes and other restrictive measures on both sides of the channel. In 1649-50 English cloth was excluded from France, and in retaliation the English government placed an embargo on imports of French wine, wool, and silk manufactures.[18] Relations between the two remained tense, with France significantly raising the duty on English cloth in 1654, and the embargo on French goods was not finally lifted until 1656.[19] This cluster of measures explains much of the disruption to French commerce during the Interregnum, although to some extent it may have been mitigated by a resultant rise in illicit trade.

Bristol's French trade fared a little better in the years after the Restoration (see Figure 56). Imports were slightly up to £16,000 in 1664/5, and in 1670/1 they had improved considerably to £41,000. After adjusting for inflation this is still well short of the level of Bristol's French imports in 1637/8, but they had at least equalled that of 1624/5. Like all European trades, however, French Imports were hit hard by the outbreak of the Dutch War in 1671/2, almost halving in value to £23,000 that year.

Although commerce between France and Bristol as a whole appears to have picked up slightly in the years after the Restoration, the same was not true for recorded imports of wine. Crawford has suggested that the 1670s and 80s marked a period of recovery for Bristol's wine trade, after a difficult period in the 1650s and 60s.[20] The figures from the Port Books,

[18] W.B. Stephens, *Seventeenth Century Exeter: A Study of Industrial and Commercial Development, 1625-1688r, 1958), p. 69.*
[19] Stephens. *Seventeenth Century Exeter,* p. 70.
[20] Crawford, *Bristol and the Wine Trade*, pp. 17-19.

however, do not show much in the way of a recovery. In the 1650s and 60s Bristol's recorded wine imports had fluctuated between about 850 and 1,000 tons, and those for the early 1670s are not dissimilar at just over 1,100 in 1670/1, and under 700 in 1671/2. The figures for the following decade or so suggest that this trend continued, with annual wine imports at one point dipping below 400 tons, and never surpassing 1,200. Terming this as a recovery would certainly seem something of an overstatement, as even at their highest, Bristol's post-Restoration declared wine imports fell far short of the 3,400 tons seen in 1637/8. The sweeter Spanish wines also continued to make up an increasingly large percentage of Bristol's wine trade, accounting for almost half of all recorded wine imports in 1686/7. It must be borne in mind that wine was a commodity particularly prone to smuggling, so the real extent of this trade is likely to be greater than the Port Book figures suggest. On the other hand, although he did present some evidence, on the whole William Culliford's investigation of smuggling in Bristol in the early 1680s picked up comparatively few cases of fraud in the wine trade.[21]

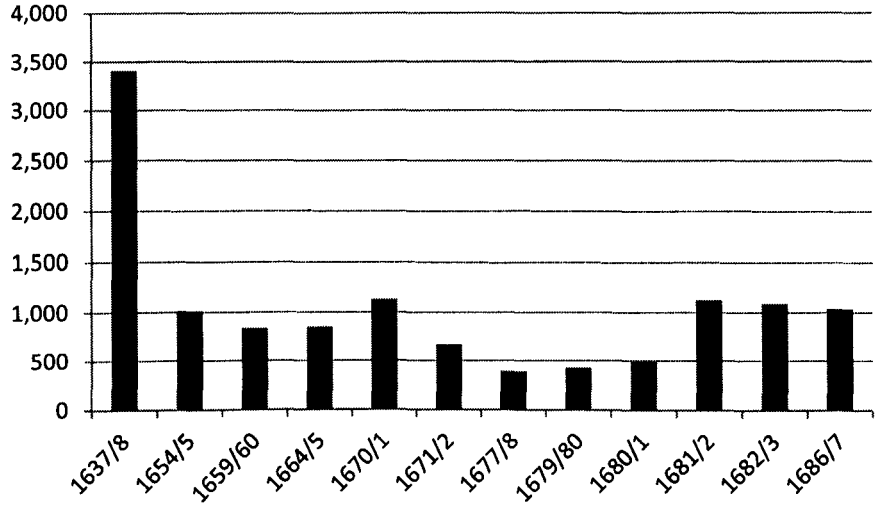

Figure 60 - Bristol's Wine Imports as Recorded in the Port Books and Wharfage Books, 1637/8-1686/7 (tons):[22]

[21] Stephens, *Seventeenth-Century Customs Service*, p. 48.
[22] TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; E190/1139/2; E190/1141/3; E190/1142/3; E190/1144/1; E190/1146/1; E190/1148/1; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 5.1.1. For notes on how the figures were converted into tons see Appendix 2.2.

With wine having declined in importance, the commodity make-up of Bristol's French imports looked very different to that in the earlier part of the century (see Figure 61). Historically wine had dominated Bristol's French imports, but in both 1670/1 and 1671/2 it made up little more than 20 per cent of declared imports.[23] The prevalence of smuggling means that it is hard to determine the exact make-up of Bristol's French imports, although cloth clearly played an important part. Imports of dowlas and Vittery canvas almost totalled £24,000 in 1670/1, forming nearly 55 per cent of recorded imports. Significant quantities were also imported the following year, accounting for 44 per cent of Bristol's French imports. The true extent of this trade may have been even greater, as Culliford's report revealed that in the early 1680s considerable quantities of linen were being smuggled into Bristol.[24] Small but steady quantities of other goods such as honey, prunes, and paper were also imported from France, but in many ways the most striking development is the growth in imports of spirits. Declared imports of aquavita were as high as £5,000 in 1671/2, making up 22 per cent of French imports and surprisingly even surpassing the nominal value of the wine trade. As they fell victim to the excise, spirits were also particularly prone to smuggling, and so the real extent of this trade may again have been greater than the figures suggest.

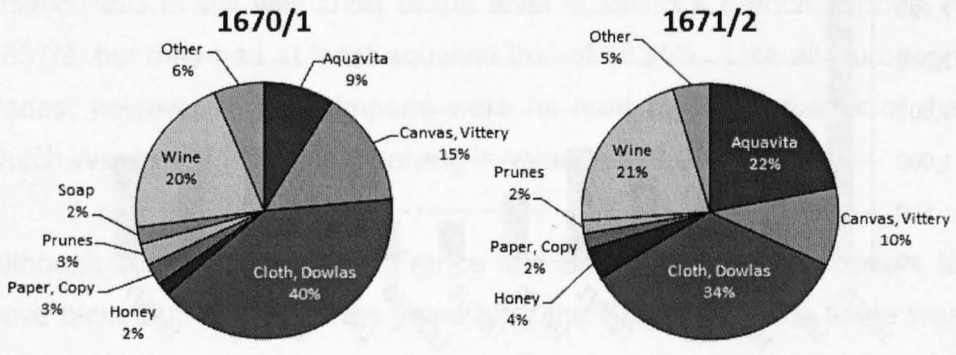

Figure 61 - Bristol's French Imports by Commodity, 1670/1 and 1671/2 (in pounds sterling):[25]

[23] Assigning a nominal value of £16 per ton to wine. Although not linked to the wholesale price, this has been adjusted for inflation from the figure used earlier in the century and is likely to remain in line with the Book of Rates valuation on other commodities.
[24] Stephens, *Seventeenth-Century Customs Service*, pp. 47-8.
[25] TNA PRO E190/1137/3; E190/1138/1. See Appendix 5.2.1.

The goods Bristol exported to France were very different to those involved in the colonial trades (see Figure 62). In spite of Ramsay's claims that the Mendip mines were past their peak, lead (much of it now in the form of shot) continued to play an important part in Bristol's exports to France.[26] In 1671/2 £1,600 worth of lead formed 53 percent of Bristol's French exports. The end of the export prohibition also saw significant quantities of leather and calf skins shipped to France. As has been discussed in the earlier chapters, a significant illicit trade almost certainly existed in these goods prior to the Civil War, but with the need for concealment over, they made up around 13 per cent of Bristol's declared French exports in 1671/2. Although less central and less varied than in the American trades, manufactured goods also played some part. Even though cloth was now far from its historical levels of importance, and indeed Bristol had become a net importer of cloth from France, £250 worth of cottons still accounted for almost 8 per cent of French exports. There was also more than £200 worth of worsted stockings, clearly reflecting the growth of the stocking knitting industry in the region, and a smattering of other manufactured goods including £4 worth of the glass bottles for which Bristol was to become especially known. It is likely that the majority of these goods were sourced either in Bristol or its immediate hinterland. For example, Jonathan Harlow's investigation of Bristol merchant Thomas Speed's stocking exports shows that in the 1680s Speed brought stockings from a dozen or so men in Bristol and Somerset, although curiously he sent the stockings to London to be exported.[27] It must also be borne in mind that the halving of customs valuations for many manufactured goods would have meant that trade in these items was relatively more important than the customs figures suggest. However, even after adjusting the figures to account for this, manufactured goods still only accounted for 28 per cent of Bristol's exports to France.[28]

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[26] Ramsay, *English Overseas Trade,* p. 146.
[27] J.A.S. Harlow (ed.), *The Ledger of Thomas Speed 1681-90,* Bristol Record Society Vol. 63 (2011), pp. xxxiv-xxxv.
[28] Recorded exports of manufactured goods to France totalled £501.88, 16.4 per cent of £3,054.58 total French exports. Doubling the value of manufactured goods results in a figure of £1,003.75 out of £3,556.25 total exports (28.22 per cent).

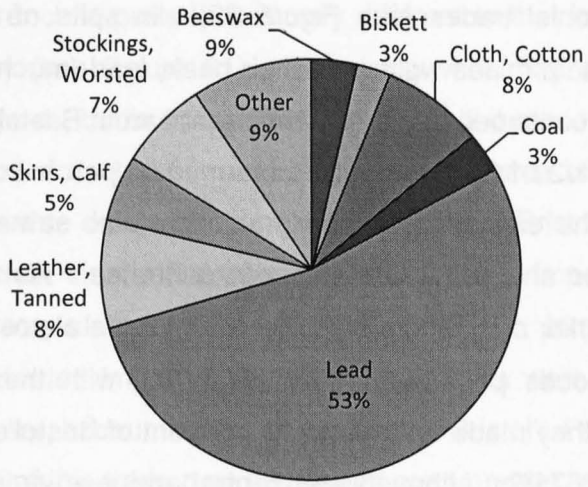

Figure 62 - Bristol's French Exports by Commodity, 1671/2 (in pounds sterling):[29]

Perhaps the most notable feature of Bristol's recorded French exports in 1671/2 is the complete absence of re-exports. As has already been discussed, London-based versions of trade at this time show that the re-export of colonial commodities such as sugar and tobacco had become an important feature of England's trade with the continent. Indeed Davis suggests that by the end of the century re-exports accounted for as much as 30 per cent of England's export trade, and that two thirds of the tobacco imported was eventually bound for continental markets.[30] The story implied by the Bristol Port Books, however, seems to be very different. Despite the huge quantities of tobacco and sugar imported in 1671/2 none is recorded as having been sent to France. On the import side, there are a couple of entries of tobacco, amounting to less than £100, recorded as having come from 'the King's Storehouse', possibly implying that they had been held in something like a bonded warehouse for potential re-export. Bonded warehouses for tobacco were not formally introduced until 1733, and it has not been possible to find any reference to either seventeenth century 'bonded warehouses' or 'the King's

[29] TNA PRO E190/1138/1. See Appendix 5.2.2.
[30] R. Davis, 'English Foreign Trade, 1660-1700', in W.E. Minchinton (ed.) *The Growth of English Overseas Trade in the 17th and 18th Centuries*, (London, 1969), pp. 78-81.

Storehouse' in the existing literature on the customs service.[31] There was, however, a 'King's Warehouse' in London dating back to the seventeenth century 'in which goods were stored as security for duties or to await condemnation after seizure'.[32] It seems likely, therefore, that the Bristol 'King's Storehouse' was a similar customs storeroom where goods were taken when they were removed from the ship, rather than a forerunner of the bonded warehouses, and that the imports of tobacco recorded as coming from there were simply those on which the merchant had taken a long time to pay the duty. In the seventeenth century, rather than being held in the neutral space of a bonded warehouse and never officially entering the country, taxation on re-exported goods worked by a system of 'drawback'. The tobacco or sugar would pay duty as normal when it was imported into England, and this would then be refunded on re-export.[33] It is certainly possible that, as they did not pay export duty, re-exported colonial sugar and tobacco were simply not recorded in the Bristol Port Books. Conversely, however, exports of other commodities which were exempt from duty, such as wool or clothing, were recorded.

Culliford's investigation into Bristol smuggling in the 1680s did reveal some re-export fraud occurring, with merchants declaring greater consignments of tobacco than they were actually shipping in order to claim a greater rebate under the drawback system. However, this was far from being the main focus of his investigations, so it does not seem likely that this trade was operating on any great scale.[34] In his study of Bristol's trade in the eighteenth century, although re-exports certainly featured, Morgan has also noted that Bristol was much less involved in the re-export of tobacco and sugar than other ports, with the majority of its

[31] W.J. Ashworth, *Customs and Excise: Trade, Production, and Consumption in England, 1640-1845*, (Oxford, 2003), p. 69. See also: N.S.B. Gras, *The Early English Customs System*, (Cambridge, Massachusetts, 1918); M. Hale, 'Concerning the customs of goods imported and exported', in F. Hargrave, *A Collection of Tracts Relative to the Law of England, from Manuscripts, now First Edited by F.H.*, vol. 1. (Dublin, 1787).
[32] E.E. Hoon, *The Organisation of the English Customs System 1696-1786*, (Newton Abbot, 1968), p. 150.
[33] '1675 Book of Rates', pp. 71-2; Hale, 'Concerning the customs of goods', p. 212.
[34] Stephens, *Seventeenth-Century Customs Service*, p. 50.

colonial imports being destined for the home market.[35] It seems reasonable to suppose, therefore, that the same could have been true of the late seventeenth century. It thus appears that, rather than contributing to England's role as 'the World's Entrepot', re-exporting colonial goods to Europe, Bristol in the post-Restoration years may already have been acting primarily, as Minchinton described it in the eighteenth century, as a 'Metropolis of the West' supplying English needs along its river and coastal network.[36]

Overall, the quarter of a century after the Civil War can at best be described as a mixed period for Bristol's French trade. Although there had been something of a recovery by 1670/1, and extensive smuggling may have meant that the real value of trade was higher than the official figures suggest, in general French imports had declined considerably since the 1630s. The principal reason for this seems to have been mutual distrust between the neighbouring economic powers, and the issuing of aggressive legislation and customs duties on both sides aiming to prevent a close rival from benefitting from trade. The apparent absence of any significant trade in re-exported goods meant that, unlike London's trade with the continent, the latter seventeenth century saw no boost to counter these disruptions. The days when Bristol's links with Gascony had been the mainstay of its trade were, therefore, long gone, and by the 1670s commerce with France was becoming just a small piece in an increasingly complex jigsaw.

Iberian Trade

Of Bristol's traditional trades, only that with Iberian markets seems to have fared well in the years immediately after the Civil War (see Figure 63). At more than £57,000, imports from the Peninsula were up on 1637/8; indeed even accounting for the doubling of the customs rates this

[35] K. Morgan, *Bristol and the Atlantic Trade in the Eighteenth Century*, (Cambridge, 1993), pp. 154-7, 181-3, 217.
[36] C. Wilson, *England's Apprenticeship 1603-1763*, (London, 1986), pp. 160-1; W.E. Minchinton, 'Bristol –metropolis of the west in the eighteenth century', in P. Clark (ed.) *The Early Modern Town: A Reader*, (London, 1976), pp. 297-313.

may represent a slight growth. This expansion can also be seen in volumetric measures; Bristol's olive oil imports had more than doubled to 850 tons from just over 400 before the Civil War (see Figure 64). As with the expansion of Bristol's American trades, this suggests that the long term economic impact of the Civil War on Bristol and its surrounding region may have been less than might be expected. Such a large consumption of oil would certainly indicate that Bristol's soap boilers and the cloth industry which they supplied were expanding their production. Even Iberian trade, however, was not to be totally free of difficulties. Following England's war with Spain between 1656 and 1658 Iberian imports were down almost 30 percent in 1659/60 to just under £41,000, and trade with Spain itself was nearly halved.

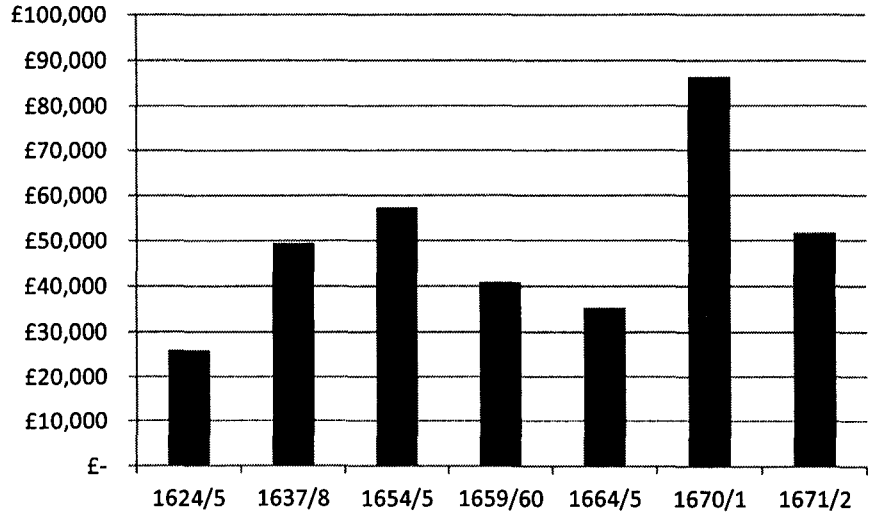

Figure 63 - Bristol's Iberian Imports as Recorded in the Port Books and Wharfage Books, 1624/5-1671/2:[37]

[37] Sacks, *Widening Gate*, pp. 42-3; TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV7/1/1/2. See Appendix 4.3. Figures prior to 1654/5 have been doubled to account for increases in the customs valuations.

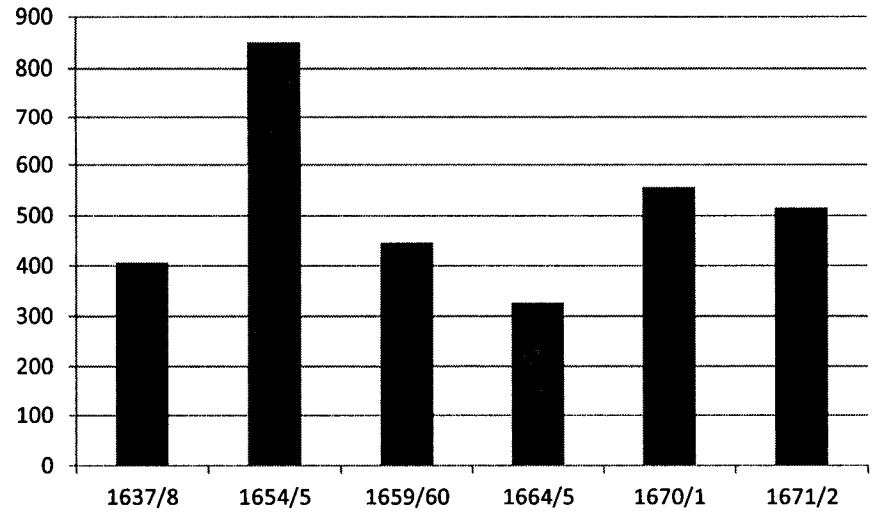

Figure 64 - Bristol's Olive Oil Imports as Recorded in the Port Books and Wharfage Books, 1637/8-1671/2 (tons):[38]

The setback for Bristol's Spanish trades continued into the years after the Restoration. At a little more than £35,250, imports of Iberian type goods in 1664/5 were even lower than the £40,750 recorded in 1659/60. As the port of origin was not recorded in the 1664/5 Wharfage Book, this figure needs to be treated with a little caution, although a further drop in olive oil imports to just 327 tons certainly supports the conclusion that Iberian trade remained depressed. The 1670s, on the other hand, saw a marked revival in fortunes for Bristol's Iberian commerce. Trade with the Peninsula made up as much as two-thirds of Bristol's imports from the continent in the 1670/1 and 1671/2 accounts. Imports in 1670/1 were as high as £86,000, a further 50 per cent increase on the figure from 1654/5. As it had throughout the century, however, this trade remained vulnerable to disruption from warfare. With the outbreak of the Third Anglo-Dutch War in 1672 Bristol's imports from the Iberian Peninsula were down to just £52,000 in 1671/2. Nonetheless, the story of Bristol's Iberian trades in the quarter of a century after the Civil War is generally a positive one. Although not matching the meteoric rise of trade with the American colonies, this branch of trade had maintained the steady expansion which had characterised it in the first half of the century. In spite of disruption

[38] TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 5.3.1. For notes on how the figures were converted into tons see Appendix 2.2.

from the Anglo-Dutch War, once the figures are adjusted for inflation, Bristol's Iberian imports in 1671/2 were still slightly up on those recorded in 1637/8.

As was highlighted by Ramsay, the growth of trade with the newly independent Portugal played an important part in the prosperity of Bristol's Iberian trades in the years after the Civil War (see Figure 65).[39] Trade with Portuguese ports had been fairly minimal in 1637/8, but in 1654/5 had reached nearly £17,000 already making up more than a quarter of Iberian imports. By 1659/60 this share had become even more significant, with imports of £19,000 from Portugal not far off the £21,500 from Spain. Although it was affected by the outbreak of the Anglo-Dutch War in 1672, the Port Books clearly show the growing importance of Portuguese trade in the years after the Restoration. Bristol's imports from Portugal had grown to more than £47,000 in 1670/1, easily surpassing the value of Spanish imports in that year (£39,400). With England's somewhat turbulent relationship with Spain, including open warfare from 1656 to 1658, political circumstances almost certainly played an important part in this development. After regaining its independence from Spain in 1640, Portugal's political neutrality created an attractive alternative source of Iberian goods in times when English relations with Spain were fraught.

[39] Ramsay, *English Overseas Trade*, p. 144.

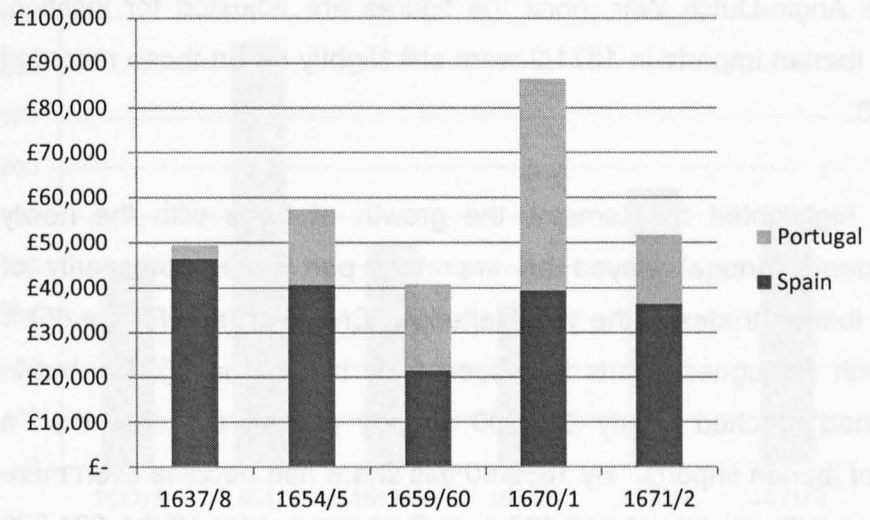

Figure 65 - Bristol's Iberian Imports by Country of Origin, 1637/8-1671/2:[40]

Even though the wine trade had declined slightly, Bristol's imports from the Iberian Peninsula remained very similar to those before the Civil War. Olive oil made up around a quarter of all Iberian imports in both 1670/1 and 1671/2, showing that Bristol's soap boiling industry remained healthy. Much of the remainder was made up by semi-luxury consumer goods such as sugar and dried fruits, the same high value wares which Sacks felt had driven the late sixteenth and early seventeenth century expansion of the southern trades.[41] Imports of raisins topped £20,000 in 1670/1, and in spite of disruption to trade in 1671/2 were still as high as £15,500 (30 per cent and 22 per cent respectively of Bristol's Iberian imports). Perhaps more surprising in the light of Bristol's burgeoning trade with the American colonies is the considerable amounts of sugar which continued to be imported from the Iberian Peninsula. These totalled £32,500 in 1670/1 and £11,000 the following year. In terms of value these compare favourably with Bristol's West Indian sugar imports (£45,500 and £56,500 in 1670/1 and 1671/2); however, this was largely as a result of favourable customs rates for unrefined sugar from English plantations. In terms of volume Bristol's Iberian sugar imports made a relatively slight contribution

[40] TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 4.3. The value for 1637/8 has been doubled to take account of changes in the customs rates. All other values were calculated using the '1675 Book of Rates', with wine being given a nominal value of £16 per ton.

[41] Sacks, *Widening Gate*, pp. 36-48.

to the total, although they tended to be refined white sugar, rather than the unrefined brown sugar which came direct from the colonies. This perhaps suggests that, although several new sugar houses had been established in Bristol in the years after the Civil War to process the growing quantities of sugar imported from the colonies, their output was not yet sufficient to meet the demand for sugar in the city and its hinterland.[42] Overall, it is clear that, as had been the case before the Civil War, in the second half of the seventeenth century demand for imported raw materials and minor luxuries continued to provide considerable impetus to Bristol's Iberian trade.

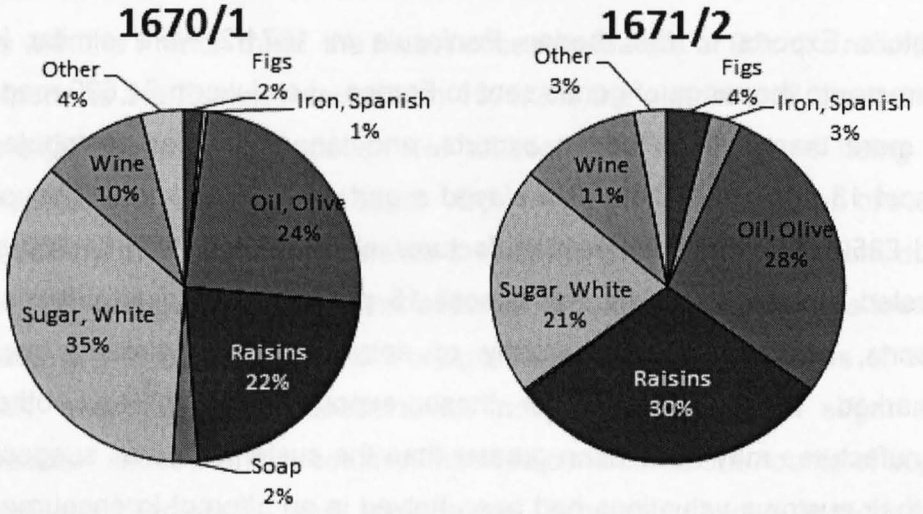

Figure 66 - Bristol's Iberian Imports by Commodity 1670/1 and 1671/2 (in pounds sterling):[43]

[42] I.V. Hall, 'Whitson Court Sugar House, Bristol, 1665-1824', *Transactions of the Bristol and Gloucestershire Archaeological Society,* vol. 65 (1944); I.V. Hall, 'Bristol's Second Sugar House', *Transactions of the Bristol and Gloucestershire Archaeological Society*, vol. 68 (1949).
[43] TNA PRO E190/1137/3; E190/1138/1. See Appendix 5.3.2.

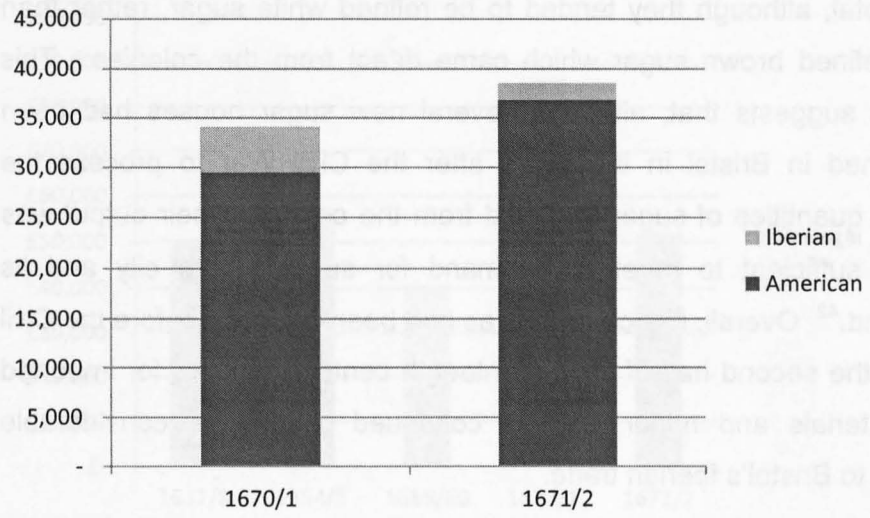

Figure 67 - Bristol's Sugar Imports by Origin, 1670/1 and 1671/2 (cwt):[44]

Bristol's Exports to the Iberian Peninsula in 1671/2 were similar in character to the range of goods sent to France. Lead worth £4,600 made up more than half of Iberian exports, and tanned leather contributed almost 13 per cent. Cloth also played a part, with £900 worth of bayes and £250 of serges. Other manufactures also featured, with £1,300 of worsted stockings, making up almost 15 per cent of Bristol's Iberian imports, being particularly worthy of note. As has already been remarked, the significance of these exports of cloth and other manufactures may have been greater than the customs figures suggest, as their customs valuations had been halved in an attempt to encourage the development of domestic industry.[45]

[44] TNA PRO E190/1137/3; E190/1138/1. See Appendix 5.3.3. For notes on how the figures were converted into Cwt. see Appendix 2.2.

[45] Manufactures worth £2,687.83 made up almost 30 per cent of Bristol's total recorded exports to the Iberian Peninsula (£9,044.96). Doubling the value of cloth and other manufactures results in a new figure of £5,375.67, which would be 46 percent of total exports (£11,732.83).

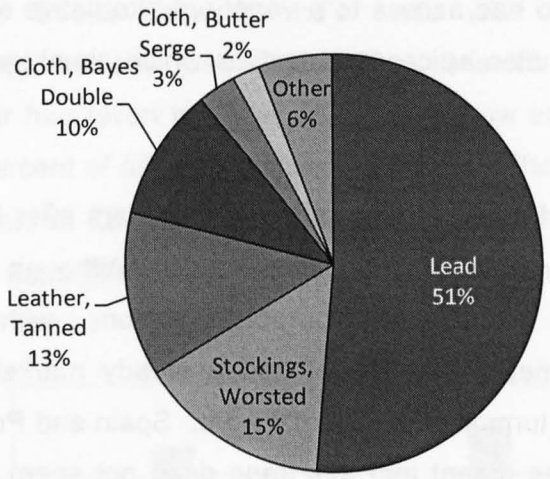

Figure 68 - Bristol's Iberian Exports by Commodity, 1671/2 (in pounds sterling):[46]

As with the French trade, the most noticeable feature of Bristol's recorded exports to the Iberian Peninsula in 1671/2 is the almost total absence of re-exported American goods. No tobacco was recorded as being re-exported and just £22.50 of sugar. Other than potential omission of these goods by the customs officers as a result of their exemption from duty, the simplest explanation for this absence of re-exports in Bristol's Iberian trade is that both Spain and Portugal had New World colonies of their own, and thus direct access to an independent source of sugar and tobacco. Indeed Bristol actually imported considerable amounts of sugar from the Peninsula, and even some Spanish tobacco (which was considered to be of higher quality than that grown on the English plantations, and so commanded a higher price).[47] Sugar and tobacco re-exported from England would therefore not be able to compete with direct imports, as having incurred less handling and transport costs these would be able to be sold for a lower price. As the Iberian Peninsula accounted for as much as two-thirds of Bristol's continental trade in the early 1670s, it is perhaps not surprising that in general Bristol's involvement in the re-export trade appears to have been much more modest than that of London. The capital was far better placed to trade with northern and

[46] TNA PRO E190/1138/1. See Appendix 5.3.4.
[47] J.E. Thorold Rogers, *A History of Agriculture and Prices in England from the year after the Oxford Parliament (1259) to the commencement of the Continental War (1793) Volume 5: 1583-1702,* (Oxford, 1887), pp. 467-8.

central Europe, and also had access to a variety of alternative re-export goods including East Indian spices and textiles which simply were not imported into Bristol.

Where Bristol's French trade had languished in the years after the Civil War, that with the Iberian nations continued to flourish. Although at times disrupted by political conflicts, favourable relations with newly independent Portugal meant that Bristol had a steady market in the Peninsula free from the turmoil of continental wars. Spain and Portugal's own New World colonies meant that this trade does not seem to have shared in the boost from re-exports which stimulated London's continental trades in the latter seventeenth century. Nonetheless, continued demand for Iberian wares, and the Peninsula's capacity to soak up English raw materials and manufactures meant that this trade maintained the drive which had led to its expansion in the first half of the century. Even though it was not expanding at such a rate as trade with the American colonies, Iberian commerce remained a profitable opportunity for Bristol's merchants.

Irish Trade

Trade with Ireland had been one of the most dynamic components of Bristol's commerce before the Civil War, with imports growing to £21,500 and constituting almost 25 percent of Bristol's total import trade. Ireland, however, was one of the bloodiest theatres of the Civil War, and English military efforts to supress Irish independence did not finally succeed until 1653. Ireland's population was hit severely by both the conflict and outbreaks of disease, not recovering its 1641 peak until at least the 1680s.[48] Gillespie has concluded that 'the early 1650s were extremely difficult years in general for the Irish economy', although following a series of good harvests there were beginning to be some signs of improvement by the end of the decade.[49] Bearing in mind the level of economic disruption, it is perhaps not surprising that the Interregnum

[48] R. Gillespie, *The Transformation of the Irish Economy 1550-1700*, (Dublin, 1998), pp. 15-16.
[49] Gillespie, *Transformation of the Irish Economy*, p. 40.

Wharfage Books show Ireland's trade with Bristol to have been significantly reduced (see Figure 69). Bristol's imports from its near neighbour had fallen to under £6,800 and now accounted for little more than 2 percent of all imports (see Figure 57). The figure for 1659/60 is a little better, at £8,700, but this is still a significant decline on Bristol's recorded imports from Ireland before the Civil War.

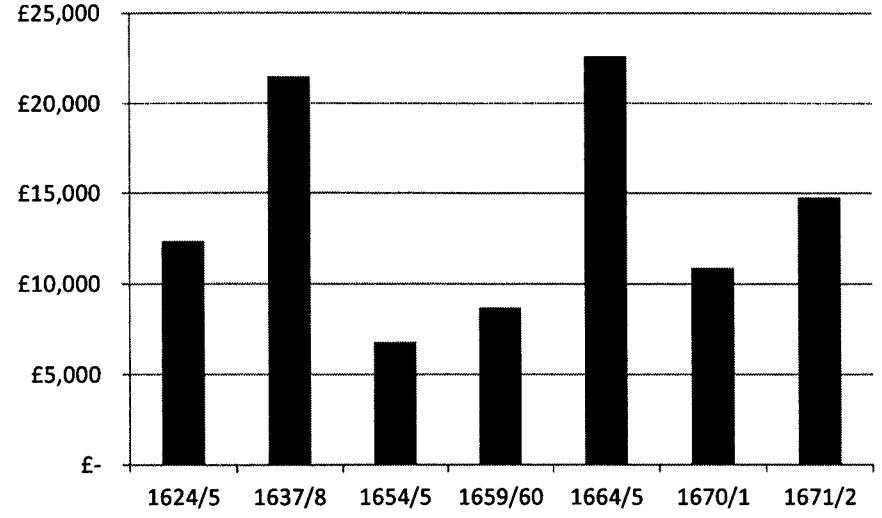

Figure 69 - Bristol's Irish Imports as Recorded in the Port Books and Wharfage Books, 1624/5-1671/2:[50]

The figures from the Wharfage Books suggest that over the space of just fifteen years Bristol's Irish trade had collapsed to less than a third of its pre-war values, and potentially the inflation of the customs rates could mean that in reality the decline was even more severe. Analysis of the customs rates for the goods most commonly involved in Bristol's Irish trade, however, shows that on the whole they had not been increased. As Table 10 shows, the vast majority of goods imported from Ireland saw no increase in their customs valuations between 1635 and 1675, with only tanned hides seeing their valuation doubled. The eight import commodities included in this table made up as much as 73.5 per cent of Bristol's imports from Ireland in 1671/2, so on the import side it can safely be concluded that the revision of the Book of Rates had only minimal

[50] Sacks, *Widening Gate*, pp. 42-3; TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV7/1/1/2. See Appendix 4.3. As the customs rates on Irish commodities remained largely unchanged, the pre-Civil War values have not been adjusted.

impact on the figures for Irish trade. Recalculating the figures recorded in 1671/2 for these 73.5 per cent of commodities using both the old and new valuations shows an increase in value of just 1.5 per cent.[51] On the export side, the vast majority of goods sent to Ireland were manufactures (56.91 per cent of recorded exports by value in 1671/2) which in fact had their valuations halved, and other exports such as hops and lead saw only modest increases. Although figures for Irish exports are thus likely to have been distorted by the changes to the Book of Rates, it is unlikely that they will have been artificially inflated. Unlike other branches of trade, therefore, the figures for Irish imports and exports after 1642 did not need to be adjusted to account for inflation, and thus can be directly compared with those before the Civil War. This means that the value of Bristol's Irish trade did decline by as much as two-thirds between 1637/8 and 1654/5.

Table 10 - Comparison of Customs Valuations for Irish Trade Goods, 1635 and 1675:[52]

		1635				1675				%
Commodity	**Unit**	**£**	**s.**	**d.**	**£MOD**	**£**	**s.**	**d.**	**£MOD**	**Increase**
Cloth, Frieze	the yard	0	0	9	£0.04	0	0	9	£0.04	100
Fish, Herring White	the barrel	0	8	4	£0.42	0	8	4	£0.42	100
Hides, Cow or Horse in Hair	the piece	0	2	6	£0.13	0	2	6	£0.13	100
Hides, Cow or Horse Tanned	the piece	0	5	0	£0.25	0	10	0	£0.50	200
Hops	the C (112 lb)	0	20	0	£1.00	1	10	0	£1.50	150
Lead, cast	the fodder (20 cwt)	9	0	0	£9.00	20	0	0	£20.00	222
Oil, Trayne	the ton	6	0	0	£6.00	6	0	0	£6.00	100
Skins, Goat in Hair	the dozen	0	6	8	£0.33	0	6	8	£0.33	100
Skins, Sheep in Wool	the skin	0	0	3	£0.01	0	0	3	£0.01	100
Tallow	the C (112 lb)	0	16	8	£0.83	0	16	8	£0.83	100

The figures from after the Restoration suggest much more positive fortunes for Bristol's Irish trade than the dire years of the Interregnum.

[51] Using the '1635 Book of Rates', recorded imports of these eight commodities would have been valued at £10,688.85. Using the post 1660 version the valuation is only fractionally higher at £10,847.44.

[52] '1635 Book of Rates'; '1675 Book of Rates'. Hops and lead are export rates, all others are import rates. The '% Increase' figure expresses the valuation in use after 1660 (1675) as a percentage of the 1635 valuation of that commodity.

Although this could potentially represent an exceptional year, Irish imports in 1664/5 were as high as £22,500. This was more than two and a half times higher than the value recorded five years earlier, and even surpassed the £21,500 recorded in the last account before the Civil War. This would certainly suggest that the Irish economy had finally begun to recover from the disruption caused by the conflict. These relatively high levels of trade, however, were not to be maintained for long. Even though they were still considerably up on the 1650s, Bristol's Irish imports in 1670/1 had halved to £11,000. In the following year they were a little better at £15,000, although this was still well short of imports in both 1664/5 and 1637/8. The most likely explanation is that this decline reflects the effect of the restrictive economic legislation of the 1660s, such as the ban on Irish cattle exports, which created much uncertainty in the Irish economy and would thus have had a negative impact on trade.[53] Such detailed understanding of economic conditions in Ireland, however, reaches far beyond what it is possible to achieve using data from the Port Books. Nevertheless, taking a longer view the prognosis for Bristol's Irish trade looks much more positive. The slight drop off in the early 1670s may have meant that Irish trade was not as prosperous as in the 1630s. It had, nonetheless, still come a long way since the difficult times in the late sixteenth century and Irish imports and exports in 1671/2 were still in excess of the values recorded in 1624/5.

An important point regarding Bristol's Irish trade in the mid-to-late seventeenth century is the increased range of the Irish ports with which Bristol was trading (see Figure 70). In the late sixteenth century, Bristol's trade with Ireland had been concentrated in the south west of the country, with ports such as Waterford, Wexford, and Youghal forming the bulk of trade. After the Restoration, however, although the traditional ports remained important, Bristol was trading increasingly with ports in central and northern Ireland. Imports from Londonderry totalling £2,300 accounted for 15 per cent of Bristol's Irish trade in 1671/2, and £2,400

[53] Gillespie, *Transformation of the Irish Economy*, p. 41.

worth of goods from Dublin made up 16 per cent; there was even £700 worth of goods from Belfast, constituting nearly 5 per cent of Irish imports. Although to an extent the geographical distribution of Bristol's Irish trade had already begun to diversify by the 1630s, these developments probably to a large extent reflect the increased spread of colonisation and immigration into the north of Ireland in the years after the Civil War. Increased English and Scottish settlement in these regions would have made them much more attractive propositions for trade.[54]

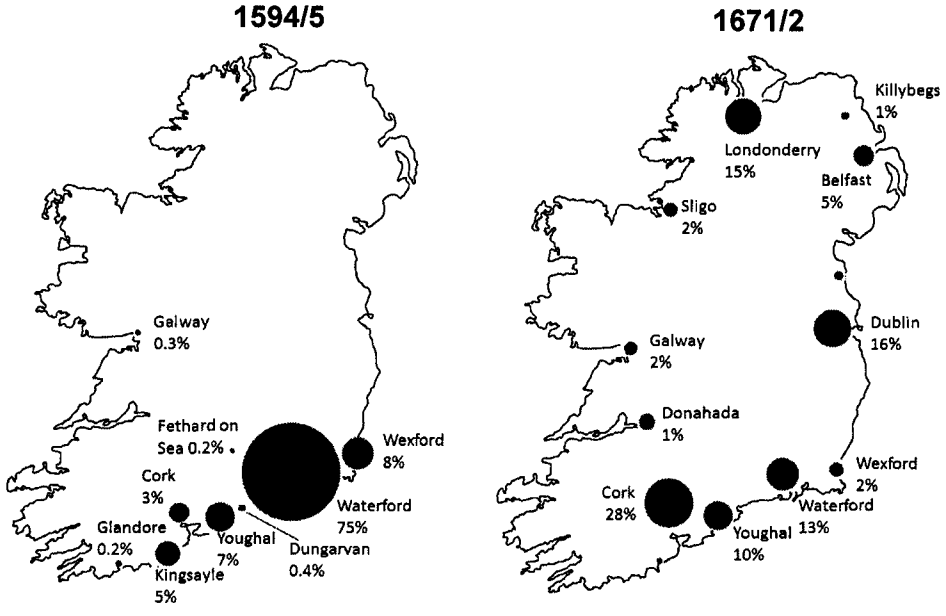

Figure 70 – Percentage of Bristol's Imports from Ireland by Port, 1594/5 and 1671/2 (in pounds sterling):[55]

With the new wave of English settlers from the 1650s it might be expected that Irish trade would have become more colonial in nature. To an extent this was true. As with the American trades, Bristol imported largely raw materials from Ireland, in exchange for which it sent a huge variety of manufactured goods as well as some re-exported luxuries. Imports from Ireland in the early 1670s were dominated by tallow, which made up around 40 per cent of imports in both 1670/1 and 1671/2, and skins which contributed a further 20 to 25 per cent (see Figure 71). This

[54] Gillespie, *Transformation of the Irish Economy*, pp. 16-19.
[55] http://hdl.handle.net/1983/1307; TNA PRO E190/1138/1. See Appendix 5.5.1.

certainly shows the strong agricultural basis to the Irish economy. Its wilder side is also evident, as mixed in with the sheep, goat, and cow skins there are also a smattering of fox, rabbit, deer, otter, and even seal, showing that there were still enough wild lands for hunting to play a part in the economy. Some fish continued to feature, accounting for 5 per cent of Bristol's Irish imports in 1671/2. Finally, there were also significant quantities of frieze which contributed around 13 percent in both years, showing that although it was becoming increasingly focused on raw material exports Ireland still possessed a significant cloth making industry.

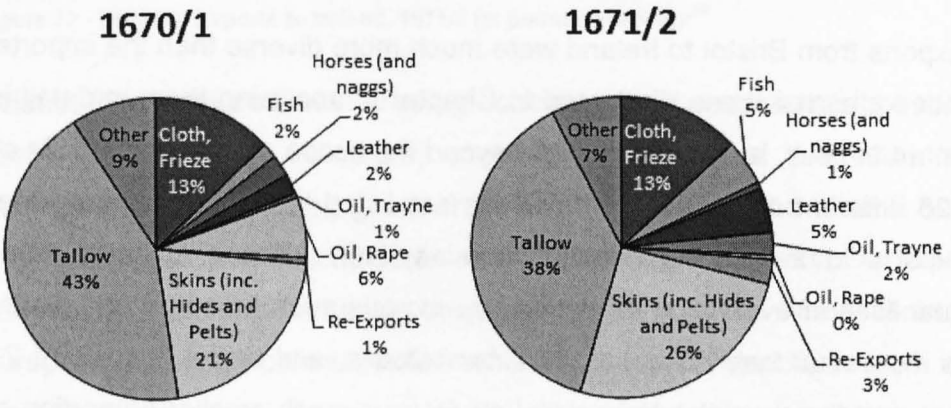

Figure 71 - Irish Imports by Commodity, 1670/1 and 1671/2 (in pounds sterling):[56]

Even though they were relatively small in terms of their contribution to the total, perhaps the most significant goods exported from Ireland to Bristol in the years after the Civil War are the small quantities of re-export goods. These made up less than 3 percent of Irish imports in both 1670/1 and 1671/2, but they had been much more significant during the Interregnum contributing 12 per cent in 1659/60 and as much as 42 per cent in 1654/5. The role of Irish provisions in trade with the American colonies has been discussed in the previous chapter, and the presence of re-exported sugar and tobacco in Bristol's Irish imports certainly show Ireland's growing connections with the Americas. There were also noteworthy quantities of European goods such as aquavita, Spanish iron, and raisins, indicating that Ireland was also developing its independent

[56] TNA PRO E190/1137/3; E190/1138/1. See Appendix 5.5.2.

trading links with the continent. Indeed it has been suggested that by 1683 England's share of Irish exports had dropped to 30 per cent, as the American colonies as well as European markets provided competition in a trade which had once been dominated by merchants from the West of England.[57] To an extent this perhaps explains why Bristol's Irish trade was unable to completely regain its former heights. Ireland had once been dependent on English ports such as Bristol and Chester as outlets. Like Bristol itself, however, by the late seventeenth century it was beginning to build a wider range of connections on both sides of the Atlantic.

Exports from Bristol to Ireland were much more diverse than the imports. Indeed, as has been discussed in Chapter 2, analysing them in detail is an art in itself, and certainly well beyond the scope of this thesis.[58] In all 228 different classes of commodities are listed in 1671/2, showing that exports to Ireland were as diverse as ever. These included small quantities of everything from exotic re-exports such as sugar and ginger to more mundane items like coal, tombstones, and barrel hoops. At 21 per cent the generic label 'wares' made up a much smaller proportion of exports than it had done in the years before the Civil War. Rather than a decline in small manufactures sent to Ireland, however, it seems that this was a result of greater diligence on the part of the customs officers in the recording of small quantities of goods. Manufactured goods accounted for almost 57 per cent of Bristol's exports to Ireland in 1671/2. A sizeable percentage of this consisted of a variety of different types of cloth, which made up 16 per cent of exports, and there was also £196 of nails (2 per cent). The most important single commodity was hops, which comprised 17 per cent of exports, and there was also more than £1,100 worth of lead and shot, accounting for 12 per cent.

[57] Gillespie, *Transformation*, pp. 46-7.
[58] See: S. Flavin, 'Consumption and material culture in sixteenth-century Ireland', *Economic History Review*, Vol. 64 (2011), pp. 1144-1174.

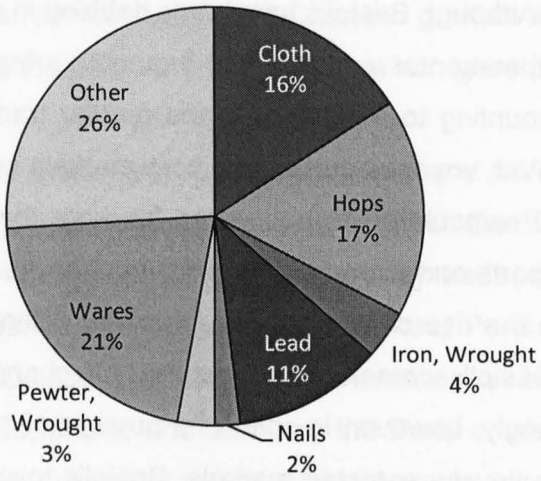

Figure 72 - Bristol's Exports to Ireland, 1671/2 (in pounds sterling):[59]

Ireland, then, provides an interesting contrast. On the one hand its trade seems very colonial in nature, exchanging agricultural products for luxuries and manufactured goods from England. But on the other it not only possessed some considerable manufacturing industries, but also had its own independent trading connections with both the Americas and Europe.[60] Although colonial settlements had been planted there both in the 1650s and earlier, unlike the West Indies and mainland America, the third Stuart Kingdom was clearly still far from being a simple colony. The Irish economy had clearly been greatly disrupted by the Civil War, and this had led to a serious decline in Bristol's Irish trade in the 1650s. In the long run, however, on-going colonisation and economic development meant that, in spite of restrictive legislation and Ireland's widening outlook, this trade was able to recover much of the prosperity that it had seen in the first half of the century.

New Opportunities

Even though Sacks has asserted that prior to the Civil War 'there were significant changes within [Bristol's] structure of commerce' as 'new markets were opened up with the addition of trades to the Netherlands, the Baltic, and the Western Atlantic' as well as in the Mediterranean, the

[59] TNA PRO E190/1138/1. See Appendix 5.5.3.
[60] Gillespie, *Transformation of the Irish Economy*, pp. 46-7.

evidence presented in Chapter 2 has shown this to be something of an exaggeration.[61] Although Bristol's merchants dabbled in a number of new trades, these experimental ventures had been occurring for a long time without ever amounting to a significant and regular trade. In the years before the Civil War, voyages outside the core markets in France, Ireland, and the Iberian Peninsula never accounted for more than 10 per cent of Bristol's total imports and exports. In the years after the Civil War on the other hand, with the rise of trade to the American colonies there can be no doubt that Bristol's commercial structure had changed significantly. Perhaps surprisingly, however, in spite of a number of new opportunities to break into previously restricted markets, Bristol's involvement in other new trades remained peripheral.

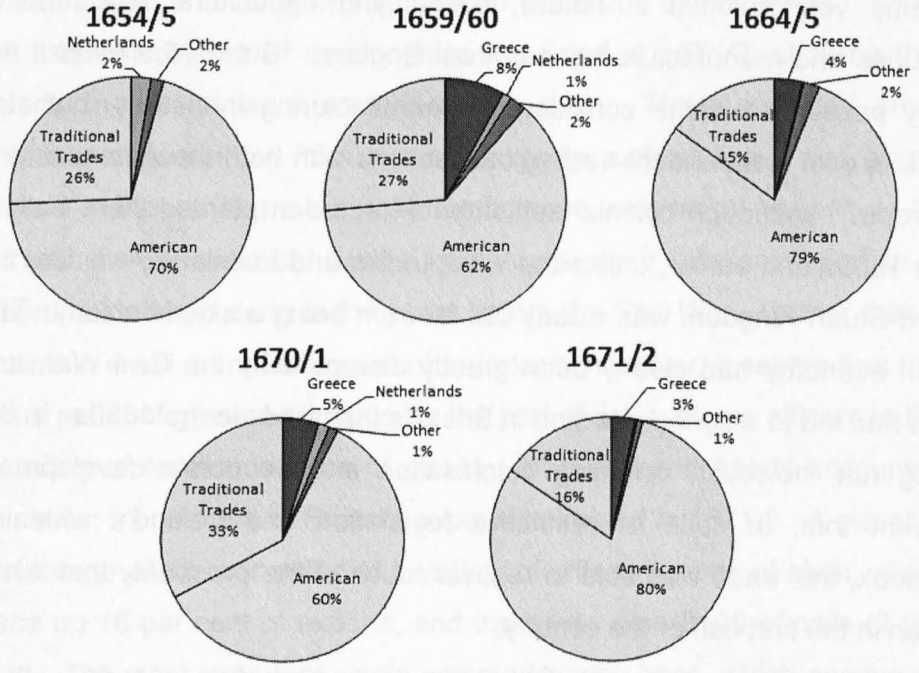

Figure 73 - Bristol's Imports by Market as recorded in the Port Books and Wharfage Books (New Opportunities), 1654/5-1671/2 (in pounds sterling):[62]

Much of the reason for Bristol merchants' lack of engagement with new trades in the years before the Civil War was legal restrictions, as voyages to many of the most profitable new markets were subject to monopolies

[61] Sacks, *Widening Gate*, p. 40.
[62] BRO SMV/7/1/1/1; SMV/7/1/1/2; TNA PRO E190/1137/3; E190/1138/1. See Appendix 4.3.

held by London based companies. In theory, however, the Civil War saw the removal of this restriction. In 1643 Charles I granted a new charter to the Society of Merchant Venturers of Bristol, which gave its members the right to:

> 'have a free Trade and Comerce ... unto and from all those parts and places beyond the Seas whither the Eastland or Russia Companies of London doe or may trade, And to and from the Hanse Townes, and any Townes, Ports, or places where the Company of Merchant Adventurers of London doe or may trade, and to and from any the Ports or places in the Levant Seas where any of our Merchants of the Turky Company doe trade, and to and from any Ports or places under the Comand or Domynion of the Kinge of Denmarke or great Duke of Muscovye'.[63]

In essence this meant that all of the pre-war monopolies no longer applied, and Bristol's merchants were free to engage in any trade they chose. The slightly dubious legal standing of this charter may explain why they were reticent during the Interregnum in exploiting its privileges. It was, after all, a wartime measure granted during the period when Charles I held Bristol and hoped to set it up as an alternative Royalist port to London. Following Charles II's ratification of the charter in 1665, however, they were on a much more secure legal footing, so it is perhaps surprising that Bristol's merchants did not show more enthusiasm for potentially profitable new branches of trade.[64]

The only significant interest in markets in northern Europe was a small upsurge in trade with the Netherlands (see Figure 74). Dutch imports were as high as £7,800 in 1654/5 and £6,000 in 1670/1. Even accounting for inflation this is a significant increase on the £1,100 imported in 1637/8. This trade, however, never accounted for more than 2.5 per ce nt of Bristol's imports, and was also highly vulnerable to disruption from the

[63] Reproduced in: J. Latimer, *The History of the Society of Merchant Venturers of Bristol, With some Account of the Anterior Merchants' Guilds*, (Bristol, 1903). , pp. 106-7.
[64] McGrath, *The Merchant Venturers of Bristol*, pp. 56-7.

recurrent Anglo-Dutch Wars. Imports from the Netherlands were down to £900 in 1664/5, and also dropped significantly to £1,500 in 1671/2. Bristol's relative lack of interest in the Netherlands trade in the years after the Civil War shows a marked contrast to its near neighbour Exeter. As Stephens has shown, Exeter took advantage of the collapse of the Merchant Adventurers monopoly to develop a significant trade with the Netherlands in the second half of the seventeenth century.[65] The principal reason for Bristol's lack of enthusiasm for these markets was a simple matter of geography. The close proximity of London and Exeter to the Netherlands meant that they had a natural advantage over Bristol, which historically had not been involved in these trades even before the advent of legal monopolies. For much the same reason Bristol also failed to develop any significant trade with the Baltic. There were occasional ships from ports in northern Europe, including Latvia, Russia, Sweden, and Norway in 1670/1. These shipments never amounted to much more than £1,000 between them, and again were quickly curtailed by the outbreak of the Dutch Wars.

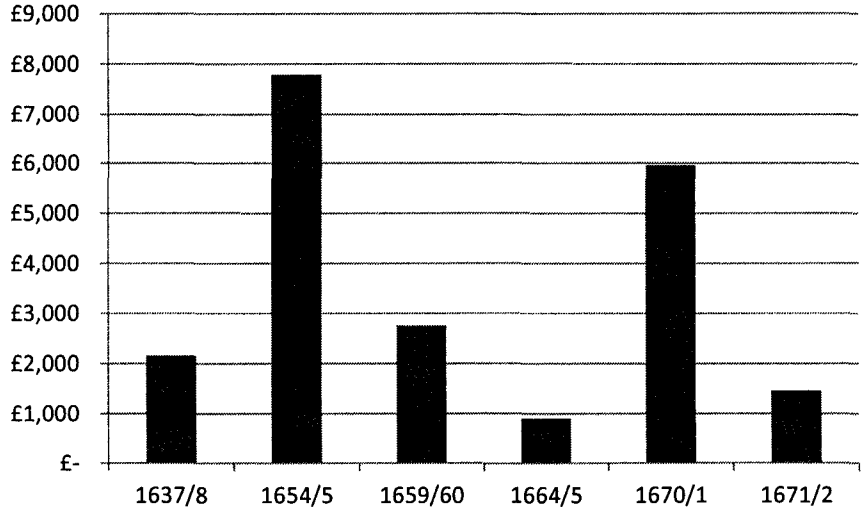

Figure 74 - Bristol's Imports from the Netherlands as recorded in the Port Books and Wharfage Books, 1637/8-1671/2:[66]

[65] Stephens, *Seventeenth Century Exeter*, pp. 85-95.
[66] TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 4.3. The figure for 1637/8 has been doubled to account for inflation of the customs duties.

Other than the rise of the American commerce, the most noteworthy development in Bristol's trade during the post-Civil War years is the import of a considerable volume of currants from Greece. As has been discussed in Chapter 2, from the 1620s onward Bristol's merchants had shown a significant degree of interest in the Greek currant trade, and were almost certainly importing currants illicitly throughout the 1620s and 30s. There was no sign of this trade in 1654/5, but in 1659/60 imports from Zante amounted to £19,000 (see Figure 75). This was 8 per cent of total imports in that year and, perhaps surprisingly, even surpassed imports from France. Imports of between £18,500 and £20,200 of olive oil and currants from Zante and Cephalonia were recorded in each of the post-Restoration accounts which have been examined, showing that this was certainly not an odd or exceptional voyage. This was certainly not an insignificant trade, and if it were not for the more spectacular growth of the American trades it would have received far more attention. Even accounting for the adjustment of the Book of Rates, the value of this Greek trade is higher than Bristol's total imports in 1594/5. By the 1670s, however, it accounted for less than 5 per cent of Bristol's total imports. It also appears to have been restricted to a relatively small group of merchants, with just thirteen individuals importing goods from Greece in 1671/2, three of whom controlled 66 percent of the trade.[67] The growth of Bristol's Greek interest, therefore, while certainly still significant, only represents a side-line to its main commercial interests in the latter seventeenth century.

[67] See Appendix 5.6.

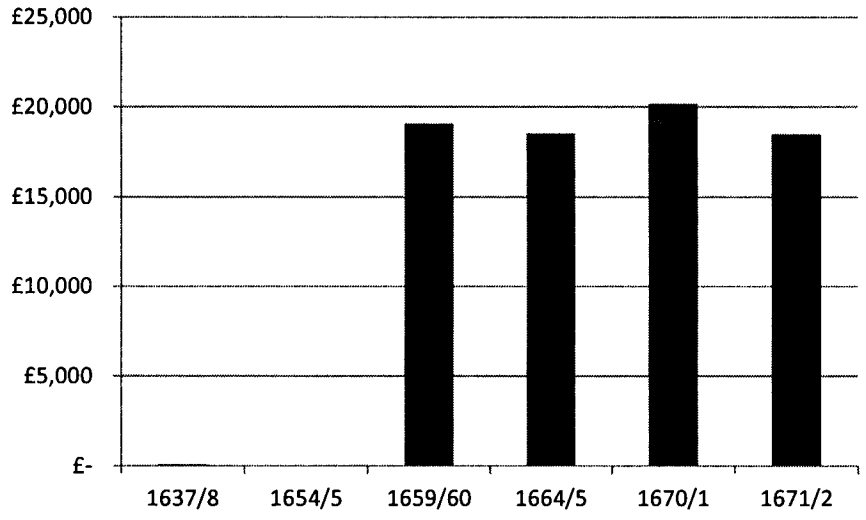

Figure 75 - Bristol's Greek Imports as Recorded in the Port Books and Wharfage Books, 1637/8-1671/2:[68]

As has been discussed in the previous chapter (see pp. 181-182), there is some evidence that Bristol merchants were conducting multi-part voyages which took in several ports around the Mediterranean, and even Tangier in North Africa. Multi-part voyages are, however, very difficult to trace using the Port Books, as normally only the immediate ports of origin or destination were listed. Few alternative sources have emerged to illuminate this practice, although some hint comes from a few ships which entered multiple destinations in the Port Books. For example, when the *Dolphin* of Bristol was loading goods in August and September 1672 she gave her destinations variously as Malaga, Tangier, and Cadiz.[69] This may suggest that the broadening of Bristol's interest in the Mediterranean was greater than the customs figures imply, however on the whole the range of commodities imported would tend to suggest that the focus remained largely on the Iberian Peninsula.

Perhaps the best example of Bristol merchants' lack of interest in developing new trades other than those to the Americas comes from 1650, when they declined the offer of an opportunity to invest in a joint

[68] TNA PRO E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV/7/1/1/2. See Appendix 4.3. The figure for 1637/8 has been doubled to account for inflation of the customs duties.
[69] PRO E190/1138/1, ff. 118v-128v.

stock venture with the then struggling East India Company.[70] The most likely explanation for this lack of interest is a notable distaste on the part of Bristol merchants for investments which would tie-up significant amounts of capital for a long period of time. As was noted in Chapter 3 (see p. 129), they had shown a similar tendency when trade to the American colonies was first developing. Initially this trade had required merchants to invest in plantation and colonisation, something which Bristol's merchant community had only shown a sporadic and somewhat lacklustre commitment to. It was only when significant quantities of sugar and tobacco became available on the open market, rather than having to enter into a long-term arrangement with planters, that Bristol's involvement in the American trades took off. To an extent this reticence when it came to making long-term investments with significant amounts of capital is understandable. After all, even the wealthiest of Bristol's merchants were relatively small players when compared to many of their London counterparts, and so simply could not afford to risk large amounts of money on such investments.

Overall it seems that a variety of factors contributed to Bristol's comparative lack of interest in developing new markets other than those in the Americas. The great capital investment involved almost certainly played an important part in Bristol merchants' unwillingness to invest in long-distance trades such as those to the East Indies, while for more local trades such as those to the Baltic and the Netherlands, geography played a more important part. The reason why Bristol did not become involved in these trades was much the same as it had been throughout its long commercial history: ports on the east coast were better positioned to trade to these markets, and thus with lower shipping costs had a competitive advantage over Bristol. Ultimately, although in some respects the middle of the seventeenth century had seen a significant transformation of Bristol's trading world, its focus on the Atlantic, for which it was perhaps the best placed of all English ports, remained the

[70] McGrath, *Merchant Venturers*, p. 58.

same. The Americas and Europe's Atlantic coast were Bristol's greatest area of competitive advantage, so it is perhaps not surprising that its merchants concentrated on exploiting this.

Conclusions

Although easily overlooked in the light of the growth of the American trade, Bristol's traditional trades continued to develop in the years after the Civil War. Commerce with the Iberian Peninsula continued to show much the same momentum as it had in the first half of the seventeenth century, although French and Irish trade did not fare so well. Both dropped off significantly during the Interregnum, and, although they had recovered somewhat by the 1670s, were unable to regain the prosperity which they had seen in the 1630s.

That Bristol's traditional trades experienced mixed fortunes at exactly the time that the American trades were growing may prompt questions as to whether there was a direct connection between the two. It appears however, that it was far from being a simple matter of Bristol's merchants abandoning their traditional trades for more profitable opportunities across the Atlantic. Some did shift to specialising largely in the American trades, however, many of Bristol's merchants also continued significant trade with the continent. Perhaps the best evidence of this is Jonathan Harlow's study of the career of Thomas Speed. Over the course of the years 1655-1674 Speed's trade was split roughly fifty-fifty between the Atlantic and Europe, with the balance shifting to sixty-forty in favour of Europe in the latter part of his career.[71] Indeed, Harlow's analysis of Speed's ledger from the 1680s suggests that European trade remained the most profitable branch of his operations. While Speed's sugar imports made a net loss of 2 per cent over the course of the decade, his imports of wine returned a 17 per cent profit.[72] The reasons for decline in the traditional French and Irish trades, therefore, lay elsewhere. With

[71] J. Harlow (ed.), *The Ledger of Thomas Speed, 1681-1690*, Bristol Records Society, vol. 63 (2011), p. xxxi.
[72] Harlow (ed.), *Ledger of Thomas Speed*, pp. xxxi-ii.

Ireland, economic disruption in the aftermath of the Civil War, and the growth of Ireland's independent connections were the main factors, while with French trade the cause appears to have been restrictive legislation and the resultant rise in smuggling.

Unlike Bristol, London's trade with the continent had received a considerable boost in the years after the Restoration as it began to re-export all manner of luxuries from the East Indies as well as the American colonies. There is, however, little evidence that Bristol re-exported colonial goods to any great extent, with the focus of its export trades remaining on the same manufactured wares, raw materials, and agricultural produce which it had shipped in the first half of the century. Although the growth of the American trades had revolutionised its commercial world, the work of historians of the eighteenth century has suggested that Bristol was never to become a true international entrepôt like London. Instead it remained focused on Atlantic trade, and developing its role of 'Metropolis of the West', acting as a gateway between the American colonies, its extensive hinterland, and Europe's Atlantic coast.[73]

[73] Minchinton, 'Bristol – Metropolis of the West'.

Conclusion

The 130 years examined by this study witnessed what was one of the greatest transformations in Bristol's commercial history. The most detailed examination to date of the surviving Port Books and Wharfage Books has revealed not only a great increase in the scale of the city's overseas commerce, but also significant shifts in the markets and commodities which made up this trade. Had William Caynges, one of Bristol's greatest fifteenth-century merchants, been transported to the eve of the Civil War in 1638 he would still have found himself fairly familiar with Bristol's commercial world. The basis of trade remained the same routes to France, the Iberian Peninsula, and Ireland which had characterised the city's commerce since the fourteenth century. However, by the Restoration in 1660 a great change had occurred, with trade to the American and West Indian colonies coming to play a prominent part. This development represented a significant break with the city's commercial past, and was to set the pattern of Bristol's trade for the next two hundred years.

The Beginning of a New Era

Over the period as a whole, there can be no question that Bristol's trade underwent a significant expansion. Recorded imports rose from £12,500 in 1563/4 to £574,800 in 1671/2 (see Figure 76). Even after adjusting for inflation of the customs duties, this represents a rise of 4,600 per cent.[1] It should perhaps be noted that Bristol's recorded trade was at a low point in the early 1560s, but compared to figures from the 1550s (before the decline occurred) the 1671/2 figure still represents a 670 per cent rise in the recorded value of imports.[2] Even allowing a considerable margin for error, this represents a considerable growth. Such an expansion of Bristol's trade had not been seen since the fourteenth century, when in

[1] Based on a comparison of http://hdl.handle.net/1983/1305, and TNA PRO E190/1137/3. The 1563/4 figure was doubled to account for inflation of the customs duties.

[2] Based on a comparison of: http://hdl.handle.net/1983/1305 and TNA PRO E190/1137/3. The 1550/1 figure was multiplied by four to account for inflation of the customs duties.

the 1350s and 60s Bristol's cloth exports had exploded from 750 to 5,000 cloths per annum, a 666 per cent rise which established the city as England's premier cloth exporting centre.[3] This growth of the cloth trade had ushered in a new era for Bristol, establishing a pattern of exporting cloth to the continent and importing predominately wine in return, which was to last until the transformations in the sixteenth and seventeenth centuries witnessed by this thesis.

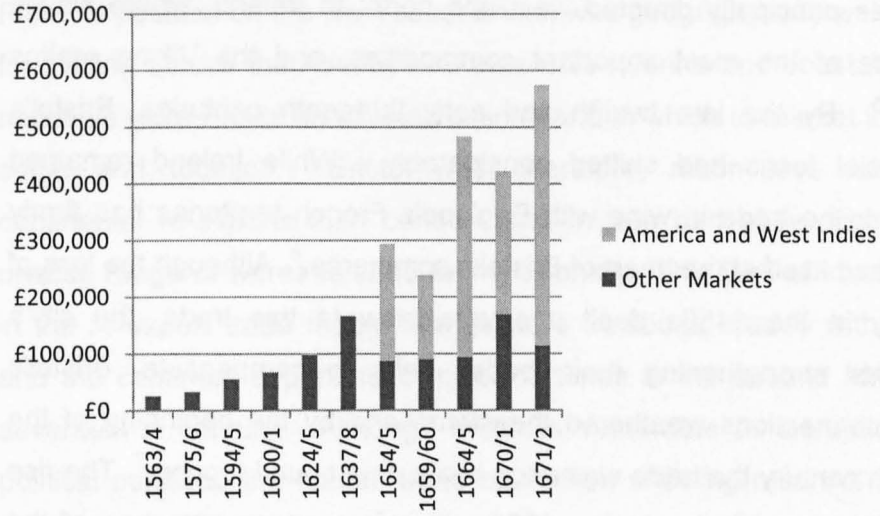

Figure 76 - Bristol's Imports as Recorded in the Port Books and Wharfage Books, 1563/4-1671/2:[4]

Other than occasional disruptions, this study has shown Bristol's trade to have been expanding throughout the years 1560-1689, with this growth occurring in two distinct phases. The first saw Bristol's trade grow considerably between the 1590s and the 1630s based largely on prosperity in its existing markets along Europe's Atlantic coast. The second, more rapid, phase occurred on entirely different lines. Beginning in the late 1640s or early 1650s, Bristol's trade grew at an even faster

[3] E.M. Carus Wilson and O. Coleman, *England's Export Trade 1275-1574*, (Oxford, 1963), pp. 76-8, 142.

[4] Sources: http://hdl.handle.net/1983/1303 http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, pp. 42-3; TNA PRO E190/1134/10; E190/1136/10; E190/1137/3; E190/1138/1; BRO SMV/7/1/1/1; SMV7/1/1/2. Figures prior to 1654/5 have been doubled to take account of changes in the customs rates.

rate, changing drastically in character as the city began to engage in commerce with the American colonies.

In the six hundred or so years since Bristol first emerged as a significant settlement, its overseas trade had changed a great deal. By the eve of the Civil War, however, it had remained essentially the same in character for the previous three hundred years. In its earliest years Bristol's trading fortunes had been based on the Scandinavian seafaring connections. Its trade was principally directed west and north: to Ireland, where slaves were one of the most important commodities, and the Viking realms beyond.[5] By the late twelfth and early thirteenth centuries, Bristol's commercial focus had shifted considerably. While Ireland remained important, the trade in wine with England's French territories had firmly established itself at the heart of Bristol's commerce.[6] Although the loss of Gascony in the 1450s dealt a severe blow to this trade, the city's merchants strengthening their Iberian links to compensate, Bristol's French connections weathered the storm, and by the beginning of the sixteenth century the trade was once again on a sound footing.[7] The rise of the American trades in the 1650s, therefore, represents one of the greatest transformations in Bristol's commercial history, and certainly the biggest since the decline of the Viking trade network. In the space of less than two decades a pattern of commerce that had essentially survived for four hundred years had changed completely. Up to the eve of the Civil War Bristol's traditional trades had been prospering, but just sixteen years later they had been supplanted at the heart of the city's commerce by the new markets across the Atlantic.

The principal reason for the growth of Bristol's transatlantic trade was simply the expansion of the American and West Indian colonies. Prior to the Civil War, Bristol had been unable to benefit from the first phases of this population expansion, largely as a result of restrictive legislation

[5] E.M. Carus-Wilson and M.D. Lobel, 'Bristol' in *The Atlas of Historic Towns*, vol. 2 (London, 1975), p. 3.
[6] Carus-Wilson and Lobel, 'Bristol', p. 6.
[7] Carus-Wilson and Lobel, 'Bristol', pp.12-14.

which prohibited tobacco from being imported into Bristol. In the years after the conflict, however, with these shackles removed, Bristol's overseas traders were quick to take advantage. Tobacco and sugar had gone from minority goods affordable only to the elite to items of mass consumption, and in turn the exclusive focus of the colonies on production of these staples meant that they were reliant on English ships to provide all manner of necessities.

From its position on the west coast Bristol was geographically well placed for trading across the Atlantic. Its extensive riverine and coastal trading networks gave Bristol an extensive hinterland in which to market imported sugar and tobacco. Bristol was, therefore, much less reliant on continental re-exports than London, and in turn had easy access to a diverse range of wares to send to the colonies. This lack of involvement in the re-export trade meant that Bristol's traditional trades with Ireland and the continent experienced mixed fortunes in the second half of the seventeenth century. Although at times vulnerable to disruption from political conflicts, the Iberian trade carried on showing much of its early century prosperity. Irish and French trade, however, did not fare as well. Both dropped off markedly in the 1650s, and although they had recovered to an extent by the 1670s, were still well short of their pre-war levels. Even though they occurred concurrently, this fall in fortunes of the traditional trades was not necessarily a result of the rise of new American commerce. Indeed many of Bristol's merchants continued to be involved in both branches of trade, and even found their European voyages more profitable. Instead it appears to have been other factors such as economic disruption and broadening horizons in Ireland, and restrictive legislation in France which led to these mixed fortunes. To a limited extent Bristol also began to be involved in new trades such as the import of Greek currants. On the whole, however, its focus remained on the Atlantic.

There can be no doubt that the beginnings of trade with the American colonies marked a significant break with Bristol's commercial past. In

other respects, however, there is also continuity with the developments of the first half of the seventeenth century, suggesting earlier roots to the change. The twin driving forces for the expansion of Bristol's colonial trades were English demand for imported luxuries such as sugar and tobacco, and overseas demand for English manufactured goods. In many respects this was the same situation which had driven the expansion of Bristol's traditional trades earlier in the century. Indeed even back into the sixteenth century the commodity make-up of Bristol's trade had begun to diversify. In addition to wine, luxuries such as sugar and dried fruit, and raw materials such as olive oil had been making up an ever more important part of Bristol's imports. The biggest changes, however, were on the export side. Although the traditional broadcloth trade was becoming increasingly monopolised by London's merchants, developments in agriculture, manufacturing, and industries, such as mining, had furnished Bristol with a much more diverse range of exports which were in great demand overseas. There can be no doubt that the advent of the American colonies changed the face of Bristol's commercial world. In some respects, however, the old patterns had been changing as early as the sixteenth century, as a broader range of both exports and imports replaced the old reliance on cloth and wine which had characterised Bristol's trade since the 1350s. There may also be a wider significance to these developments. As studies of England's trade in these years have tended to focus on London, it may be that developments in other areas of the economy have been somewhat overlooked. Overseas commerce in the capital remained focused on its traditional cloth export trade until the eve of the Civil War. Developments in other industries, the increased output of which was shipped from outports such as Bristol rather than London, may have gone unnoticed.

Changes in Interpretation

Before the Civil War

The story of trade in Bristol described above differs in many ways from that told by previous scholars. For the years before the Civil War, earlier

historians have presented contrasting views of the health of Bristol's trade. Some such as Ramsay and Stephens painted a bleak picture of decay and crisis, while others such as Vanes and McGrath were more positive but could present little evidence to back up their claims. Sacks also noted the increase in Bristol's recorded trade, but was cautious to attribute any great significance to this as a result of concerns about potential impact of inflation of the customs duties. The findings of the current study unreservedly support the more positive conclusions of Patrick McGrath. Far from being a 'dark epoch', the late sixteenth and early seventeenth centuries were a time of prosperity for Bristol, with the city's overseas commerce quickly recovering from its early Elizabethan doldrums, and then continuing to expand. Sacks' concerns that this apparent growth could be 'only illusory' have been dismissed since customs rates increased by no more than 20 per cent between 1560 and 1638.

Analysis of the duty paid as recorded in the Port Books has given a much more precise measure of the growth of Bristol's trade than previously employed forms of evidence, and also allows more sophisticated analysis of the nature of this trade. It can now confidently be stated the pre-Civil War expansion of Bristol's trade was based largely on engagement with its traditional markets, with new interests remaining economically marginal. It has also, for the first time, been possible to analyse the commodity make-up of Bristol's trade in these years. On the one hand this confirms Sacks' view that valuable southern luxuries and raw materials were important to Bristol's commercial success in the late sixteenth and early seventeenth centuries. However, it has also suggested that he was wrong to downplay Bristol's exports, as the diverse range of manufactures, raw materials, and agricultural produce shipped out of the city would have lent equal strength to its trade.

The Rise of the American Trades

Despite the fact that interpretations of the state of Bristol's trade in the pre-Civil War years are in need of adjustment, it is with regard to the rise

of the American and West Indian trades where this thesis would propose the greatest revisions. Although McGrath was a little more cautious, both Ramsay and Sacks felt that Bristol was already beginning to trade with Virginia and the West Indies prior to the Civil War.[8] The evidence uncovered by this study, however, indicates that by the late 1630s Bristol had still not developed significant commercial connections with the American colonies. Records of American trade in the Port Books were few and far between, and for much of the period Bristol was in fact barred from American commerce by a series of royal prohibitions and monopolies.

Whilst many previous studies recognise that Bristol's American trades established themselves on a notable sc ale in the second half of the seventeenth century, the statistical evidence provided to support this has often been slight. Prior to this study, the best statistical evidence for the growth of the Americas trades came from McGrath, who counted the number of ships in the Wharfage Books declaring an American origin or destination. These figures suggest that growth of American commerce was relatively modest, accounting for a seventh of all ships between 1658-60, rising to a sixth between 1667-8, and finally reaching between a quarter and a third in the late 1680s.[9] As McGrath readily admitted, however, these figures are an unreliable measure of the significance of a branch of trade, as they take no account of the size of the ships involved, or the relative value of the commodities they carried.

This study, therefore, represents the first detailed statistical attempt to chart the rise of Bristol's American and West Indian trade. The results clearly show that these trades grew to a significant size much faster, and much earlier than has previously been supposed. Whereas McGrath's

[8] P.V. McGrath, 'Bristol and America, 1480-1631', in K.R. Andrews et.al. (eds.), *The Westward Enterprise: English Activities in Ireland, the Atlantic and America 1480-1650*, (Liverpool, 1978), pp. 96-102; G.D. Ramsay, *English Overseas Trade During the Centuries of Emergence: Studies in Some Modern Origins of the English-Speaking World*, (London, 1957), pp. 142-3; D.H. Sacks, *The Widening Gate: Bristol and the Atlantic Economy, 1450-1700* (Berkeley, 1991), pp. 40, 50-1.

[9] P.V. McGrath, *Merchants and Merchandise in Seventeenth-Century Bristol*, Bristol Record Society Vol. XIX (1955), p. xxi.

shipping based figures suggested that the American trades accounted for just 14 per cent of Bristol's total in the late 1650s, figures from the Wharfage Books show that they already made up as much as 70 per cent of the value of imports. Rather than a steady growth over the course of the second half of the seventeenth century, therefore, it appears that Bristol's American trades developed rapidly in the years after the Civil War, emerging almost fully fledged in the 1650s and continuing to grow rapidly until the 1670s. The pace of this expansion in the years after the Civil War is also significant in national terms. Relatively little has been written about the state of England's economy during the Interregnum. That a trade based on manufactured exports and semi-luxury imports had undergone such a marked growth by 1654/5, just five years after the end of the conflict, shows that in spite of the mass death and destruction, the economic dislocation caused by the Civil War had been relatively short-lived.

It is generally accepted that by the end of the seventeenth century the American trades had come to play an important part in Bristol's commerce, but prior to this study there had not been any meaningful statistical investigation into when and at what pace this development occurred. The startling rate of growth which has been revealed in the period between the 1650s and 1670s represented something of a commercial revolution for Bristol. In terms of the national picture of trade, however, this perhaps does not present a particularly significant challenge. Although the latter seventeenth century was seeing something of a renaissance for the western ports, Bristol's trade was still dwarfed by that of London. It does, nevertheless, suggest that the commercial history of other ports, including London, may need to be examined afresh, particularly for the crucial decades of the 1650s and 60s.

Even though the eighteenth century remains Bristol's 'Golden Age', it appears that the mid-seventeenth century was much more important as a period of transformation than has previously been supposed. This raises

some interesting questions about one of the darkest aspects of Bristol's self-identity. It is a commonly held belief that Bristol's fortunes were 'built on the slave trade'. As early as the reign of Queen Anne a local annalist remarked that 'there is not a brick in the city but what is cemented with the blood of a slave'.[10] Indeed so strong is this association in Bristolians' minds between 'trade' and 'the slave trade' that when, in 2006, it was proposed to name a new shopping centre the 'Merchants Quarter' there was a public outcry, eventually resulting in the development being renamed 'Cabot Circus'.[11] Bristol, however, was officially barred from the triangular slave trade until 1698, as the monopoly on trade with Africa's Slave Coast was held by a London-based company. As this study has shown, Bristol's American and West Indian trades were in fact firmly established as early as 1654/5, almost fifty years before the city began to trade to any significant degree in African slaves, and that these trades continued to grow rapidly over the next twenty years. There is little evidence to support assertions that Bristol was interloping into the slave trade during the seventeenth century, so it seems that African connections may not have been as crucial to the success of Bristol's American trade as has often been assumed. This supports the findings of Kenneth Morgan's examination of Bristol's trade in the eighteenth century.[12] He found that over time Bristol increasingly tended to favour the more efficient shuttle routes direct to the colonies, rather than complex multilateral voyages. By the middle of the eighteenth century his figures show that more than three fifths of the tonnage of transatlantic shipping was engaged on shuttle routes, and just 16.9 per cent in the slave trade.[13] This thesis has shown that, in some ways, rather than a

[10] E. Williams, *Capitalism and Slavery*, (London, 1964), p. 61.
[11] See: 'New Name for Merchant's Quarter', 19/04/2006, <http://news.bbc.co.uk/go/em/fr/-/1/hi/england/bristol/4924310.stm> (accessed: 04/05/2011);
'Slave Name Row Debate Postponed', 22/03/2006, <http://news.bbc.co.uk/go/em/fr/-/1/hi/england/bristol/4828062.stm> (accessed: 04/05/2011);
'Name's "slavery link offensive"', 22/02/2006, <http://news.bbc.co.uk/go/em/fr/-/1/hi/england/bristol/4737578.stm> (accessed: 04/05/2011);
'"Offensive" Centre Name Changed', 20/04/2006, <http://news.bbc.co.uk/go/em/fr/-/1/hi/england/bristol/4924416.stm> (accessed: 04/05/2011); for contemporary reporting of the 'Merchants Quarter' controversy.
[12] K. Morgan, *Bristol and the Atlantic Trade in the Eighteenth Century*, (Cambridge, 1993), ch.3.
[13] Morgan, *Bristol and the Atlantic Trade*, p. 57.

new development this simply represents a shift back to the pattern which had dominated in the latter part of the seventeenth century.

It is also worth noting that much of the expansion of Bristol's American trades occurred before the use of black slave labour became common in the American colonies. The slave trade only began to grow rapidly in the years after the Restoration, and 'before 1660 the number of Africans in the North American population was relatively small'.[14] Bristol's American trades, however, had already grown significantly before this time, making up as much as 70 per cent of Bristol's recorded imports. It is true that Bristol's American imports continued to grow in the years after the Restoration at the same time the slave trade was beginning to develop. It was also at this time, however, that Bristol's American trades shifted in focus away from the West Indies towards Virginia, where the transition to slave labour did not begin until 1680, and did not become prominent until the eighteenth century.[15] By 1671/2 Virginia and the American mainland accounted for almost 70 per cent of Bristol's imports, while the West Indies made up less than 12 per cent.[16] To some extent Bristol's American trade seems to have stagnated, and even declined during the last two decades of the seventeenth century as slavery was becoming more firmly established in Virginia. Initially at least, therefore, even in terms of the production of the crops, the success of Bristol's American trades was not tied to slavery. The horrific story of the slave trade is something which we should never forget, and certainly not play down. However, the evidence from the Port Books and Wharfage Books suggests that, even in the late seventeenth century, Bristol's mercantile achievements were not entirely dependent on slavery or the slave trade. Bristol's Atlantic network was established long before it became involved in the slave trade, with English demand for sugar and tobacco and colonial demand for manufactured goods providing the impetus.

[14] K. Morgan, *Slavery and Servitude in North America, 1607-1800*, (Edinburgh, 2000), p. 29.
[15] Morgan, *Slavery and Servitude*, p. 36.
[16] Based on analysis of TNA PRO E190/1138/1.

Methodological Approach

Studies of Early Modern English trade based on the customs records are not a new phenomenon; however in many ways the methodology adopted by this thesis moves beyond previous work. Until relatively recently it had been assumed that the sheer volume of data that they contained made it impossible to do any more than skim the surface of the material contained within the Port Books. A late seventeenth-century writer said of processing the Port Books that it 'would require the full-time work of four men to deal with London alone each year'.[17] Although in Davis's view this probably said more about the inefficiency of the seventeenth-century Civil Service, he still felt that 'the task is enormous'.[18] More recently Kenneth Morgan has suggested that 'the hundreds of goods and diverse weights and measures listed in the Port Books... almost defy analysis' and that 'given a lifetime in which to conduct an investigation, it would be possible to use these sources for selected years to calculate the volume of Bristol's exports and then to convert quantities into prices by using the Book of Rates'.[19] Recent advances in computer technology have, however, revolutionised what is possible in terms of processing statistical information. As this study has shown, although still time consuming, detailed analysis of the Port Books is certainly now possible, and can provide an unprecedented level of detail on Early Modern trade. This thesis, therefore, represents the first attempt to conduct a long duration study of the trade of a port based on evidence provided by the Port Books.

There have been previous studies which examine trade over the course of a century or more. These, however, have tended to rely on summary statistics such as those provided by the Enrolled Accounts.[20] Studies based on the Port Books and their predecessors the Particular Accounts are also not a new phenomenon, although these have usually been

[17] R. Davis, 'English Foreign Trade, 1660-1700', in W.E. Minchinton (ed.), *The Growth of English Overseas Trade in the 17th and 18th Centuries*, (London, 1969), p. 85.
[18] Davis, 'English Foreign Trade', p. 85.
[19] Morgan, *Bristol and the Atlantic Trade in the Eighteenth Century*, p. 91.
[20] See for example: J.M. Vanes, *The Port of Bristol in the Sixteenth Century,* (Bristol, 1977), pp. 21-6.

restricted to examining accounts from just one or two years, or a particular branch of trade. Perhaps the earliest such study, published in 1929, was Ada Longfield's examination of Anglo-Irish trade in the sixteenth century.[21] Longfield did perform some analysis on a number of different accounts, although much of her work was based on detailed sets of accounts from just three years. In terms of studies of Bristol's trade, Evan Jones analysed Bristol's shipping industry in the 1540s based on three sets of Particular Accounts, and Sacks' study examined two Port Books from 1575/6 and 1624/5.[22] Unsurprisingly, after those of Bristol, the London Port Books have been those most frequently studied. Millard used the inward Port Books to look at London's imports in the early seventeenth century, and two sets of London accounts have also been published; H.S. Cobb examined the Particular Accounts from 1481-2, and Brian Dietz a Port Book from 1567/8.[23] More recently, Nuala Zahedieh has used a database created from the 1686 Port Book to conduct a detailed examination of London's colonial trades in the latter seventeenth century.[24] The Port Books have also been used to study trade at a number of the other outports. These, however, have often been restricted to examining just a few books, such as Alan Metter's examination of Kings Lynn between 1610 and 1614, or, like R.W.K. Hinton's study of Boston, have only conducted limited analysis of trade itself.[25]

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[21] A.K. Longfield, *Anglo-Irish Trade in the Sixteenth Century*, (London, 1929).

[22] E.T. Jones, 'Bristol Shipping Industry in 16th Century' *unpublished PhD thesis*, (University of Edinburgh, 1998); Sacks, *Widening Gate*, pp. 36-48. For an earlier period see also: E.M. Carus-Wilson (ed.), *The Overseas Trade of Bristol in the later Middle Ages*, Bristol Record Society vol. VII (1937).

[23] A.M. Millard, 'The import trade of London, 1600-1640', (Unpublished PhD thesis, London University, 1956); H.S. Cobb (ed.) *The Overseas Trade of London Exchequer Customs Accounts 1480-1*, London Record Society vol. XXVII (1990); B. Dietz (ed.) *The Port and Trade of Early Elizabethan London Documents*, London Record Society vol. VIII (1972).

[24] N. Zahedieh, *The Capital and the Colonies: London and the Atlantic Economy 1660-1700*, (Cambridge, 2010).

[25] R.W.K. Hinton (ed). *The Port Books of Boston, 1601-1640*, Lincoln Record Society vol. 50 (1956); G.A. Metters (ed.), *The Kings Lynn Port Books, 1610-1614*, Norfolk Record Society vol. LXXIII (2009); see also: W.B. Stephens, *Seventeenth Century Exeter*, (Exeter, 1958); D.M. Woodward, *The Trade of Elizabethan Chester*, (Hull, 1970); Woodward, 'The Overseas Trade of Chester, 1600-1650', *Transactions of the Historic Society of Lancashire and Cheshire*, vol. XXII (1970), pp. 25-42; J.A.C. Whetter, 'Cornish Trade in the 17th Century and an Analysis of the Port Books', *Journal of the Royal Institution of Cornwall*, New ser., IV (1964), pp. 388-413; J.H. Andrews, 'The Trade of the Port of Faversham, 1650-1750', *Archaeologia Cantiana*, vol. 69 (1956), pp. 125-31.

While much of its research still awaits publication, the potential to carry out a long duration study based on the Port Books and Particular Accounts was first seriously explored by the ESRC funded Project 'Ireland-Bristol Trade in the Sixteenth Century'.[26] As part of an examination of changes in the size and structure of Ireland's trade, and the light this could shed on the development of the economy of south east Ireland, the project transcribed Bristol customs accounts from eleven years spanning the whole of the sixteenth century; the last four of which were used as part of this study. Using the data from these accounts, Susan Flavin has studied the evolution of consumption and material culture in Ireland across the sixteenth century.[27] Perhaps closest to the current study as a long duration examination of trade based on the Port Books and Particular Accounts is Duncan Taylor's research into the smaller Bristol Channel ports in the sixteenth century. By collecting data from both coastal and overseas customs records, as well as other types of accounts, Taylor showed that while their trade was much smaller than that of Bristol, each of these ports had its own profile and independent connections.[28]

Changes in Customs Rates

Even with the aid of a computer in processing the data, there are still several major challenges which have to be overcome to make a long duration study based on the Port Books possible. Foremost amongst these is changes in the customs rates, which could potentially result in a significant distortion of the figures. The late sixteenth and seventeenth centuries were periods which saw a great deal of monetary inflation, and therefore the valuations contained within the Books of Rates were occasionally revised to adjust for this, for example being increased by an

[26] RES-000-23-1461 See: http://www.bris.ac.uk/Depts/History/Ireland/; and S. Flavin and E.T. Jones (eds.), *Bristol's Trade with Ireland and the Continent 1503-1601: The evidence of the exchequer customs accounts*, Bristol Record Society Vol. 61 (2009).
[27] S. Flavin, 'Consumption and Material Culture in Sixteenth Century Ireland', *Economic History Review* (2011), pp. 1144-1174; S. Flavin, 'Consumption and Material Culture in Sixteenth-Century Ireland', (*unpublished PhD thesis*, University of Bristol, 2011).
[28] D. Taylor, 'The Maritime Trade of the Smaller Bristol Channel Ports in the Sixteenth Century', *Unpublished PhD Thesis* (University of Bristol, 2009).

average of 118 per cent in 1558.[29] As the amount of poundage paid was determined by these official valuations, rather than the wholesale value of the goods, any increase in the recorded value of trade in goods paying this duty could, as Sacks suggested, merely be a statistical illusion.[30] Revisions of the poundage valuations, therefore, have the potential to seriously distort the figures provided by the Port Books.

Major overhauls of the poundage valuations occurred fairly regularly in the period covered by this study, most notably in 1558, 1604, 1642, and 1660. This has the potential to render a long-term study using the Port Book data impossible, as figures from before and after a significant revision cannot be directly compared. Fortunately by comparing the rates for both before and after the revision it is possible to establish the average rate of increase, and then adjust the figures accordingly. Although the changes in 1558 had been significant, those of 1604 were less so, seeing an average rise of just 13 per cent, meaning that Elizabethan and early Stuart figures can be compared without a great degree of adjustment. The alterations which occurred during the Civil War and Interregnum were on a greater scale, seeing poundage valuations rise by around 90 per cent. As with the 1558 revisions therefore, a simple doubling of previous figures allows them to be compared fairly accurately with those from the second half of the seventeenth century.

The situation is complicated slightly by the fact that the rate of increase was not uniform from commodity to commodity. It may have been the case that on the commodities which made up the bulk of Bristol's trade the rate of increase was in fact significantly greater than the overall average would suggest. For the early seventeenth century this does not appear to have been a problem. Recalculating the trade of 1600/1 using both the old and new sets of rates in fact shows an increase of little over 7 per cent. As a result of the rapidly falling prices of tobacco and sugar,

[29] T.S. Willan (ed.) *A Tudor Book of Rates*, (Manchester, 1962), pp. xxvii-xxviii.
[30] Sacks, *Widening Gate*, p. 376.

and mercantilist meddling with the export rates, however, the situation in the second half of the century is a little more complicated. The Book of Rates valuation tended to lag behind the current wholesale price for tobacco and sugar, so in the middle of the century these commodities are considerably over-valued. The impact of this on the figures is to say the least striking. Using the 1642 Book of Rates, the value of trade in 1654/5 is £638,000, more than double that which the 1660 version gives, with American/West Indian trade accounting for 85, rather than 70 per cent of imports. It was, therefore, decided that the valuations from the 1660 Book of Rates would be used for the 1650s, as it is better to underplay the extent of expansion in the sugar and tobacco trades rather than greatly overstate it.

Harder to resolve are alterations to the export valuations which occurred during the Interregnum. Attempting to foster domestic industry, and stifle that of England's rivals, the duty on manufactured exports was halved in an effort to encourage trade in them, while that on many raw materials was increased significantly to discourage their export. With the growing importance of manufactures to Bristol's trade, the net result of this is that the recorded value of exports actually dropped in the years after the Restoration, when the great expansion of imports suggests that exports too should have been growing. This means that export figures from before and after the Civil War cannot be directly compared without significant revisions. As the import figures give a good measure of the expansion of trade, it was not felt necessary to attempt any adjustment. Such a comparison may, however, be possible if manufactured and raw material exports are separated out and have different multiplication factors applied to them.[31]

[31] Closer analysis of the rates would be required to establish if the extent of adjustment varied from commodity to commodity. Roughly, however, multiplying raw materials by 1, manufactures by 4, and all other goods by 2 should give a balanced set of export figures. An alternate approach, as adopted by Nuala Zahedieh's study of the London Port Books, would be to disregard the Book of Rates valuations altogether and apply a fresh set of prices (see: N. Zahedieh, *The Capital and the Colonies: London and the Atlantic Economy 1660-1700*, (Cambridge, 2010), pp. 12-13).

A final problem comes from changes in the method of collection of the customs duties. Certain commodities such as fish, wool, or the dyestuff logwood were at times either made exempt from duty or had their taxation farmed out to a separate party. These, however, were often fairly marginal trades, and for reasons of monitoring illicit activities they were usually recorded in the Port Books anyway, meaning that a nominal value can be added. A further change is the separation of the port of Gloucester in 1575, however as Gloucester had only ever made up around 1 per cent of Bristol's trade the impact of this on the figures is likely to have been minimal.[32] Overall, therefore, alterations in the duties and customs system can have a significant distorting effect on the figures recorded in customs records such as the Port Books, although, at least in this study, on the whole the figures can be adjusted to account for this. It does not, therefore, make it impossible to use the Port Books to conduct a comparative study of trade over a period of a century or more, to establish at least the broad trends of trade.

The Impact of Smuggling

Perhaps the most difficult factor to account for is the illicit trade, and this could potentially have a significant impact on the Port Book figures. Merchants, however, did not smuggle indiscriminately, so by examining the available evidence and considering which branches of trade would have given sufficient incentive to smuggle it is possible to gauge the likely impact of illicit trade on the statistics. In the first half of the seventeenth century Bristol's illicit trade appears to have followed much the same pattern as observed by Evan Jones for the sixteenth century.[33] The high cost of licences meant that considerable quantities of prohibited goods such as calf skins and Welsh butter were exported illicitly, and prohibitively high imposition duties also led to the smuggling of luxury goods such as wine. Wartime embargoes on trade could also lead to some illicit commerce with restricted markets, and the growth of monopolies and other restrictions may also have led Bristol's merchants

[32] Flavin and Jones (eds.), *Bristol's Trade with Ireland and the Continent*, p. xix.
[33] E.T. Jones, *Inside the Illicit Economy: Reconstructing the Smugglers' Trade of Sixteenth Century Bristol*, (Farnham, 2012).

to conceal voyages to Greece and the Americas. On the whole, however, the principal conclusions about Bristol's trade in this period are not undermined. The main story is growth of Bristol's trade, and smuggling would only have added to this, although it may to some extent have exaggerated the level of decline in the 1560s and 70s. Although towards the end of the period there may have been some illicit ventures into new markets, these remained a peripheral activity, and there can be no doubt that on the eve of the Civil War the traditional trades remained the core of Bristol's commerce.

As it had marked a major watershed in terms of the development of Bristol's trade as a whole, the second half of the seventeenth century also saw significant shifts in Bristol's patterns of illicit trade. As a result of falling agricultural prices, export prohibitions were lifted in the early 1660s, removing the incentive for one of the principal branches of Bristol's illicit trade. This combined with the relatively low rate of duty on manufactured exports means that illicit exports would have been minimal in the second half of the seventeenth century. Import smuggling, on the other hand, remained rife. William Culliford's investigations into the Bristol customs service in the early 1680s revealed an administration which was every bit as corrupt as that of the sixteenth century.[34] As a result of the introduction of prohibitively high duties, considerable amounts of linen, and also other luxury commodities such as wine and spirits were smuggled in from France. The main branch of illicit trade, however, appears to have been tobacco imports. Estimates of the extent of this trade vary, but it seems that something between 3 and 17 percent of Bristol's tobacco may have been smuggled in the late seventeenth century. Again, however, this does not undermine the principal conclusions of this study. The decline of the French trade may have been slightly less marked than suggested by the figures, but overall there can be no doubt that the American colonies had replaced the traditional European commerce at the heart of Bristol's overseas trade. Regardless

[34] W.B. Stephens, *The Seventeenth Century Customs Service Surveyed: William Culliford's Investigation of the Western Ports, 1682-84*, (Farnham, 2012), pp. 35-54.

of the level of smuggling, there is no doubt that Bristol's American trades had expanded greatly, and additional smuggled tobacco would only serve to accentuate this trend.

Potential of the Port Books

Even with the above mentioned caveats, a study spanning a century or more using the Port Books is possible. It is important to be aware of areas where the figures can potentially be distorted; changes in customs rates; changes in methods of collection; and changes in the incentives to smuggle could all have a significant impact on the recorded figures for trade. It is nonetheless possible to adjust the figures to account for many of these problems, and, in the case of seventeenth century Bristol at least, they do not undermine the principal conclusions. Even allowing considerable margins for error it is clear that Bristol's trade expanded greatly over the course of the late sixteenth and early seventeenth centuries, and also that the American trades developed rapidly to play an increasingly important part in this growth.

It must also be noted that this thesis has only scratched the surface of possible investigations which could be carried out using the Port Books. Bristol is just one port, and this study has examined little more than one century of its commercial history. The E190 series contains as many as 20,000 Port Books spanning the years 1565 to 1799, and the Particular Accounts contained in the E122 series take the coverage back to as early as 1272.[35] The coverage for many other ports is as good as, if not better than that for Bristol, so the potential certainly exists to carry out many similar studies for different ports and regions. In addition it would also be possible to explore areas tangent to the simple overseas trade which has formed the main focus of this study. The diverse range of data recorded in the Port Books means that they could be used to study the evolution of the shipping industry, or to examine the social implications of trade by cross referencing the names of those responsible for consignments with occupational data. In addition the coastal accounts could yield valuable

[35] http://www.nationalarchives.gov.uk/records/research-guides/port-books.htm

information about the movement of goods round the country, shedding light on both changes in consumption patterns and the evolution of regional industries. As has been shown in this study, different ports, different centuries, and different studies will all present new challenges in interpreting the data, yet overcoming these problems is both possible and well worth the effort. Simply sampling the statistical data or relying heavily on qualitative sources can potentially present a heavily distorted picture, so, as has been shown here, detailed analysis of the Port Books can provide a considerable challenge to many previous interpretations. As the detailed study of seventeenth century Bristol Port Books and Wharfage Books has provided such substantial challenges to received wisdoms, it seems likely that further such studies could alter our understanding of Early Modern commerce to a significant degree.

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Appendices

Appendix 1.1

Bristol's Overseas Trade as Recorded in the Port Books, 1541/2-1637/6 (in pounds sterling):[1]

	Imports	Exports
1541/2	17,178	7,103
1542/3	9,483	5,793
1545/6	15,928	13,888
1550/1	21,608	14,268
1563/4	12,470	7,729
1575/6	16,433	7,063
1594/5	27,880	7,054
1600/1	33,843	9,402
1601/2	34,277	12,659
1608/9	-	27,679
1611/12	-	36,125
1612/13	44,712	-
1618/19	-	33,959
1620/1	-	34,092
1624/5	50,060	22,525
1628/9	-	27,320
1636/7	-	48,587
1637/8	82,836	-

[1] Sources: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate,* pp. 42-3; TNA PRO E190/133/1; E190/1133/8; E190/1133/11; E190/1134/3; E190/1134/10; E190/1134/11; E190/1136/1; E190/1133/3; E190/1133/8; and E190/1133/10. The import figures for 1608/9 and 1620/1 are artificially low as wine imports were not recorded in those years.

Appendix 1.2

Bristol's Overseas Trade as Declared in the Enrolled Accounts 1658/9-1602/3 (in pounds sterling):[1]

Year	Imports	Exports
1558/9	5,391	4,216
1559/60	14,949	9,711
1560/1	14,264	8,106
1561/2	15,403	6,927
1562/3	18,016	9,873
1563/4	11,893	7,746
1564/5	12,752	4,487
1565/6	9,197	5,797
1566/7	11,482	4,892
1567/8	14,173	7,645
1568/9	9,910	4,671
1569/70	14,150	5,763
1570/1	17,036	6,565
1571/2	18,871	6,424
1572/3	16,781	7,990
1573/4	18,169	10,033
1574/5	16,091	5,556
1575/6	17,323	7,003
1576/7	14,651	5,797
1577/8	15,666	5,463
1578/9	19,625	5,135
1579/80	16,840	7,763
1580/1	16,901	12,370
1581/2	18,091	8,474
1582/3	16,756	8,030
1583/4	19,735	5,227
1584/5	16,569	4,908
1593/4	13,589	8,143
1594/5	28,619	6,501
1595/6	23,352	10,601
1596/7	21,028	15,726
1597/8	23,241	7,880
1598/9	20,809	7,592
1599/1600	28,174	5,601
1600/1	33,833	7,058
1601/2	35,794	10,526
1602/3	32,079	7,960

[1] TNA PRO, E356/28-29.

Appendix 1.3

New Imposition Returns for Bristol, 1610/11-1639/40 (in pounds sterling):[1]

	Imports	Exports	Total
1610/11	11,150	24,148	35,329
1611/12	12,020	19,236	31,256
1612/13	10,036	18,431	28,467
1613/4	8,171	19,113	27,284
1614/5	12,931	17,314	30,245
1615/6	13,192	12,454	25,645
1616/7	12,595	14,641	27,237
1617/8	8,749	15,656	24,405
1618/9	9,217	10,210	19,427
1619/20	8,675	9,552	28,227
1620/1	9,685	9,818	21,504
1621/2	9,017	7,691	16,708
1622/3	9,538	10,324	19,862
1623/4	7,780	10,857	18,638
1624/5	8,034	7,288	15,322
1625/6	8,499	8,928	17,427
1626/7	16,928	9,054	25,977
1627/8	8,058	2,599	10,658
1628/9	5,144	9,466	14,710
1629/30	8,593	8,935	17,528
1630/1	7,987	8,490	16,477
1631/2	12,425	10,284	22,710
1632/3	12,571	12,806	25,378
1633/4	11,444	14,597	26,042
1634/5	19,092	10,591	29,684
Significant revision of duties in 1635.			
1635/6	39,631	10,280	49,911
1636/7	42,520	14,192	56,712
1637/8	48,449	8,648	57,097
1638/9	38,542	26,859	65,394
1639/40	32,746	17,620	50,366

[1] Source: TNA PRO, E351/797-826.

Appendix 2.1

1 - Bristol's Imports by Commodity, 1563/4-1637/8 (in pounds sterling):[1]

	1563/4	1575/6	1594/5	1600/1	1620/1	1637/8
Cloth	314	702	2853	492	427	8013
Currants	-	-	30	4162	-	215
Fish	722	-	102	576	1064	443
Fruit	94	190	798	1502	2689	8245
Grain	133	-	739	-	84	4242
Iron	1524	296	220	-	335	475
Oil, Olive	1395	2240	1484	5339	8007	6505
Pepper	138	3287	-	-	125	72
Salt	498	1418	619	895	960	1256
Skins	493	71	572	206	2246	5084
Sugar	37	267	9063	2426	4047	1349
Wine	5300	4007	7177	14684	38	31658
Woad	820	1885	910	723	1534	1033
Wood	43	52	274	302	1220	1082
Wool	31	19	274	280	631	5584
Other	927	1999	2764	2257	11998	7582

2 - Bristol's Wine Imports, 1563/4-1637/8 (tons):[2]

1563/4	1575/6	1594/5	1600/1	1612/13	1624/5	1637/8
662.5	557.32	913.66	1875.78	1623.75	1795.92	3414

[1] Based on analysis of: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1136/8.

[2] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, pp. 42-3; TNA PRO E190/1134/3; E190/1136/10.

Appendix 2.2

Weights and Measures

	Ton
Barrels	8
Tierces	6
Hogsheads	4
Puncheons	3
Butts/Pipes	2

For the sake of simplicity the above capacity measures have been used throughout, although in reality the capacity of various containers varied significantly according to time, place and commodity.[3] This may, therefore, result in some slight discrepancies, although it will certainly not undermine the broad trends shown by the data. These measures have also been used by several other studies of Bristol's sixteenth and seventeenth century trade, so will allow for easy comparison.[4]

It has been assumed throughout that there were 2,240 lb in a ton. The Book of Rates usually lists a Hundredweight as 112 lb. (resulting in exactly 20 Cwt. in a ton) so it seems likely that this was the definition most commonly in use at the time.

The values stated in the Book of Rates in use at the time were adopted for all other weights and measures.

[3] See: J.J. McCusker, 'Weights and Measures in the Colonial Sugar Trade: The Gallon and the Pound and Their International Equivalents', *The William and Mary Quarterly*, Third Series, Vol. 30 No. 4 (1973), pp. 599-624.
[4] See: S. Flavin and E.T. Jones (eds.), *Bristol's trade with Ireland and the Continent, 1503-1601,* Bristol Record Society Vol. 61 (2009), pp. 943-966; J. Harlow (ed.), *The Ledger of Thomas Speed, 1681-*1690, Bristol Record Society Vol. 63 (2011), p. 524.

Appendix 2.3

1 - Bristol's Exports by Commodity 1563/4-1637/8 (in pounds sterling):[1]

	1563/4	1575/6	1594/5	1600/1	1608/9	1618/19	1620/1	1628/9	1636/7
Beans	-	38	-	-	-	261	13	951	-
Beer	-	-	-	-	-	531	870	2046	1698
Butter	-	-	-	2	-	237	1089	1406	1301
Cloth	6011	4454	3788	1863	11826	10054	7948	3332	7612
Fish, Dry Newfoundland	-	-	115	403	-	15	5	-	-
Iron	102	149	106	447	196	31	285	96	272
Lead	618	1420	851	3004	9968	3925	3809	3407	2948
Skins, Calf	-	-	-	2105	1849	6639	7212	3915	6508
Wares	-	-	6	-	2484	9737	10504	5874	23435
Wax	395	92	363	210	170	834	716	294	675
Other	604	909	1827	1368	1186	1696	1640	6000	4139

2 - Bristol's Broadcloth Exports1563/4-1637/8 (Cloths of Assize):[2]

1563/4	1575/6	1594/5	1600/1	1620/1	1624/5	1636/7
1,038	814	523	267	866	249	321

[1] Based on analysis of: http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1133/8; E190/1134/10; E190/1136/1; E190/1136/3; and E190/1136/10.

[2] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1134/10 and E190/1136/10; Sacks, *Widening Gate*, p. 43.

3 - Bristol's Recorded Calf Skin Exports 1563/4-1636/7 (the dozen):[3]

1563/4	1575/6	1594/5	1600/1	1608/9	1618/19	1620/1	1628/9	1636/7
-	-	-	-	3,082	11,065	12,020	6,524	10,847

4 - Bristol's Lead Exports 1563/4-1636/7 (cwt):[4]

1563/4	1575/6	1594/5	1600/1	1608/9	1618/19	1620/1	1628/9	1636/7
823	1,894	1,135	4,006	13,290	5,233	5,079	4,542	3,930

[3] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; TNA PRO E190/1133/9; E190/1136/3; E190/1134/11; E190/1136/1; E190/1136/8.

[4] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; TNA PRO E190/1133/9; E190/1136/3; E190/1134/11; E190/1136/1; E190/1136/8.

Appendix 2.4

1 - Bristol's Imports by Country of Origin 1575/6-1637/8 (in pounds sterling):[1]

	1575/6	1594/5	1600/1	1620/1	1624/5	1637/8
Atlantic Islands	1,100	860	873	2,587	2,446	3,437
Baltic	0	0	270	0	193	730
France	1,923	7,111	15,110	3,598	18,306	29,228
Greece	0	0	0	0	900	46.67
Ireland	405	3401	1113	11838	12347	21496
Netherlands	0	0	0	605	781	1080
Newfoundland	0	278	184	360	901	389
North America	0	0	0	0	1168	60
Portugal	6,361	21	959	4,562	3,725	1,474
Spain	6,644	4,788	8,542	7,280	9,248	23,239
'The Sea'	0	10433	2008	0	0	0
Unknown	0	940	4462	4277	0	1598
Other	0	48	322	62	45	58

2 - Bristol's Exports by Country of Origin 1575/6-1636/7 (in pounds sterling):[2]

	1575/6	1594/5	1600/1	1620/1	1624/5	1636/7
Atlantic Islands	0	0	0	1280	845	3078
Barbary	0	0	0	1416	0	2498
France	1,434	3,897	5,205	5,434	11,689	5,302
Ireland	838	1878	1755	12376	7747	20597
Italy	124	737	220	0	46	680
Italy & France	0	272	1951	0	0	0
Newfoundland	0	0	0	709	40	1298
Portugal	2,926	72	0	5,442	407	2,309
Spain	1,723	0	0	5,853	1,523	6,891
Unknown	18	98	67	1513	0	5380
Other	0	231	204	69	228	554

[1] http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, 42-43; TNA/PRO, E190/1134/10, and E190/1136/10.
[2] http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; Sacks, *Widening Gate*, 42-43; TNA/PRO, E190/1134/10, and E190/1136/8.

Appendix 2.5

1 - Bristol's Exports to Ireland, 1636/7 (in pounds sterling):[1]

	1636/7
Aniseed	2
Aquavita	42
Beer	1,410
Buttons	4
Carpeting	9
Cloth, Bayes	82
Cloth, Buckram	0.3
Cloth, Canvas	8
Cloth, Cotton	40
Cloth, Devon Dozens	7
Cloth, Dowlas	3
Cloth, Dunsters	45
Cloth, Dyed	3
Cloth, Frieze	32
Cloth, Fustian	27
Cloth, Holland	9
Cloth, Kersey	2
Cloth, Mocheares	3
Cloth, Sayes	13
Cloth, Sempitteram	8
Cloth, Serges	2
Cloth, Short	7
Cloth, Spanish	37
Cloth	5
Currants	8
Demie Casters	5
Frying Pans	3
Galles	1
Hemp	1
Hops	309
Indigo	176
Iron	66
Knives	12
Lead	17
Liquorice	1
Macherne	11
Nails	141

[1] TNA PRO E190/1136/8.

Metheglin	2
Nether	7
Netting	15
Oil	4
Oil, train	6
Pewter	7
Raisins	1
Salt	4
Shumack	13
Scythes	3
Snappells	1
Soap	41
Stock Cards	22
Stockings	2
Sugar	3
Tar	2
Tobacco	282
Trenchers	3
Wares	17,363
Wares, Haberdashery	17
Wool Cards	3
Unknown	249

2 - Bristol's Imports from Ireland by Commodity 1563/4-1637/8 (in pounds sterling):[2]

	1563/4	1575/6	1594/5	1600/1	1637/8
Beef	-	-	-	-	951
Cloth	288	220	1,538	470	4,799
Fish	722	-	86	-	233
Re-Exports	51	50	1,016	310	15
Skins/Hides	482	105	575	252	7,447
Wool	31	19	49	7	4,572
Other	34	11	137	73	3,419

[2] http://hdl.handle.net/1983/1303; http://hdl.handle.net/1983/1304; http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; http://hdl.handle.net/1983/1307; http://hdl.handle.net/1983/1308; and TNA/PRO, E190/1136/8.

3 - Bristol's Imports from Ireland by Origin of Merchant (in pounds sterling):[3]

	1575/6	1594/5	1600/01	1637/8
Indigenous	24	1,088	257	9,496
Irish	380	2,313	775	10,410
Scottish	-	-	-	58
Unknown	-	-	-	1,472
Bristol	24	860	146	-
Merchant Venturers	-	-	-	1,265

4 - Bristol's Imports from Ireland by Home Port of Ship 1575/6-1637/8 (in pounds sterling):[4]

Home Port	Country	1575/6	1594/5	1600/1	1637/8
Jersey	Channel Islands	-	-	8	-
Barnstaple	England	-	25	104	151
Berkeley	England	-	-	15	144
Bridgwater	England	-	-	-	655
Bristol	England	13	482	857	225
Elmore	England	-	-	-	872
Epney	England	-	-	-	84
Gatcombe	England	-	-	15	-
Gloucester	England	-	182	-	-
Hinton	England	-	-	28	-
Ilfracombe	England	-	-	-	611
London	England	-	-	36	-
Minehead	England	-	-	-	130
Minsterworth	England	-	-	-	447
Newnham	England	23	-	-	1,780
Padstow	England	-	15	-	-
Radley	England	-	-	-	659
Tewkesbury	England	20	-	-	929
Watchet	England	-	-	-	252
Westbury-on-Severn	England	-	-	65	799
Weymouth	England	12	-	-	-
Ballyhack	Ireland	-	-	-	261
Coleraine	Ireland	-	-	-	477
Cork	Ireland	2	-	-	-

[3] <http://hdl.handle.net/1983/1305>; <http://hdl.handle.net/1983/1306>; <http://hdl.handle.net/1983/1307>; <http://hdl.handle.net/1983/1308>; TNA PRO E190/1136/10.

[4] <http://hdl.handle.net/1983/1303>; <http://hdl.handle.net/1983/1304>; <http://hdl.handle.net/1983/1305>; <http://hdl.handle.net/1983/1306>; <http://hdl.handle.net/1983/1307>; <http://hdl.handle.net/1983/1308>; TNA PRO E190/1136/10.

Home Port	Country	1575/6	1594/5	1600/1	1637/8
Crook Haven	Ireland	-	-	-	93
Dublin	Ireland	8	-	-	-
Dungarvan	Ireland	43	5	-	427
Fethard on Sea	Ireland	-	54	-	61
Kinsale	Ireland	51	-	38	-
Londonderry	Ireland	-	-	-	125
New Ross	Ireland	15	117	12	1,013
South Munster	Ireland	-	-	-	251
Waterford	Ireland	176	550	190	1,863
Wexford	Ireland	14	98	18	3,743
Youghal	Ireland	10	-	8	318
Gdansk	Poland	-	75	-	-
Tremelo	Unknown	-	-	-	191
Unknown	Unknown	-	-	-	576
Aberthaw	Wales	-	-	-	648
Milford Haven	Wales	-	169	74	3,653
Pembroke	Wales	21	-	-	-
Tenby	Wales	-	-	66	-

Appendix 2.6

Bristol's Iberian trade by Port 1575/6 and 1637-8 (in pounds sterling):[1]

	1675/6	1636-8
Andalusia	879	-
Ayamonte	199	-
Bilbao	-	1,629
Biscay	399	47
Cadiz	4,060	8,791
Galicia	-	4
Majorca	640	-
Malaga	-	13,966
Puerto de Santa Maria	96	-
Sanlucar de Barrameda	1,456	1,528
San Sebastian	638	2,975
Lisbon	7,944	2,048
Unknown	-	1,523

[1] http://hdl.handle.net/1983/1305; http://hdl.handle.net/1983/1306; and TNA/PRO, E190/1136/8 and 1136/10.

Appendix 3.1

Commodity Valuations Used For Analysis of the Wharfage Books:[1]

Commodity	£	s.	d.	unit	£mod	Notes
Allum	2	0	0	the cwt (112 lb)	£2.00	
Almonds	6	0	0	the cwt (112 lb)	£6.00	
Aniseeds	3	0	0	the cwt (112 lb)	£3.00	
Aquavita	5	6	8	the barrel	£5.33	
Bacon	0	5	0	the flitch	£0.25	of Ireland
Barley	0	5	0	the quarter	£0.25	This was the rate when prices were high (exceeding 3s 6d the bushel), the normal rate was 3s 4d the bushel.
Baskets (hand baskets)	0	3	4	the dozen	£0.17	
Battery	9	0	0	the cwt (112 lb)	£9.00	
Beans	0	5	0	the quarter	£0.25	This was the rate when prices were high (exceeding 3s 6d the bushel), the normal rate was 3s 4d the bushel.
Beef	1	0	0	the barrel	£1.00	
Bell Metal	1	13	4	the cwt (112 lb)	£1.67	
Brandy	2	13	4	the barrel	£2.67	There is no separate value for brandy, so that for aquavita has been substituted.
Brass	0	1	0	the pound	£0.05	There is no specific value for brass listed, so a value for Brass Pile Weights has been used.
Brimstone	0	6	8	the cwt (112 lb)	£0.33	
Butter	1	0	0	the barrel	£1.00	
Cable Yarn	0	13	4	the cwt (112 lb)	£0.67	

[1] '1675 Book of Rates'; '1635 Book of Rates'; TNA PRO E190/1136/10; BRO SMV/7/1/1/1/1; SMV/7/1/1/1/2.

Commodity	£	s.	d.	unit	£mod	Notes
Canvas	6	0	0	the 100 ells (6 score)	£6.00	French or Normandy Linnen Canvas; I cannot find a standard length for a Bale, so assuming the Customs rate would have been based on the standard unit of shipment, I have taken it to be 100 ells
Capers	0	0	6	the pound	£0.03	
Cloth, Dowlas	5	0	0	the piece containing 106 ells	£5.00	This is a sub class listed under Locrams. Have assumed that 'Bales' and 'Packets' contained the standard measure of 106 ells.
Cloth, Freeze	0	0	9	the yard	£0.04	For non-specific units such as 'packs' and 'bundles' I have used the average of yards per ton of the entries where this is recorded (600)
Cloth, Hereford	4	0	0	the hundred ells containing 6 score	£4.00	I'm not one hundred per cent sure of this identification, but I have assumed it is 'narrow Harford'.
Cloth, Lockrams	5	0	0	the piece containing 106 ells	£5.00	Assuming a bale is the standard unit of 106 ells.
Cloth, Ozbriges	60	0	0	the roul containing 1500 ells at 5 score the cwt	£60.00	
Cloth, Poldavies	1	0	0	the bolt containing 28 ells	£1.00	Again, have assumed that a 'roll' was the standard measure of 28 ells.
Cordage	0	13	4	the cwt (112 lb)	£0.67	
Cork	0	16	8	the cwt (112 lb)	£0.83	All other sorts, not 'for Shoemakers'.
Cotton Wool	0	0	4	the pound	£0.02	
Currants	6	0	0	the cwt (112 lb)	£6.00	
Deal Boards	4	0	0	the hundred (6 score)	£4.00	
Figs	1	13	4	the cwt (112 lb)	£1.67	
Fish	1	0	0	the hundred (6 score)	£1.00	
Fish, Salmon	2	0	0	the barrel	£2.00	
Fish, Wet	2	6	8	the hundred (6 score)	£2.33	I have assumed this refers to Codfish
Flax	1	0	0	the cwt (112 lb)	£1.00	

Commodity	£	s.	d.	unit	£mod	Notes
Frankincense	0	12	0	the cwt (112 lb)	£0.60	
Fusticke	0	5	0	the cwt (112 lb)	£0.25	
Gauls	2	0	0	the cwt (112 lb)	£2.00	
Ginger	0	1	4	the pound	£0.07	
Hemp	8	0	0	the cwt (112 lb)	£8.00	
Hemp, Rough	0	13	4	the cwt (112 lb)	£0.67	
Herrings	0	8	4	the barrel	£0.42	
Hides, Raw	0	2	6	the piece	£0.13	
Hides, Tanned	0	10	0	the piece	£0.50	
Honey	12	0	0	the ton	£12.00	
Hoops, Iron	1	6	8	the cwt (112 lb)	£ 1.33	
Hops	15	0	0	the cwt (112 lb)	£15.00	
Horns				the thousand	£0.13	I could not find Horns in the Book of Rates, so this is calculated from the rate charged in 1671/2.
Indigo	0	1	0	the pound	£0.05	
Iron	7	0	0	the ton	£7.00	
Iron Potts	3	0	0	the dozen	£3.00	
Iron Shot	7	0	0	the ton	£7.00	I could not find a separate rate, so used the one for Iron.
Iron Wire	7	0	0	the ton	£7.00	I could not find a separate rate, so used the one for Iron.
Lead	4	0	0	the ton	£4.00	
Lemons	1	0	0	the thousand	£1.00	Have used Oranges and Lemons rather than pickled Lemons, as this fits better with the unit used.
Linen	6	0	0	the 100 ells (6 score)	£6.00	French or Normandy Linen Canvas
Linseed Oil	70	0	0	the ton	£70.00	
Liquorish	1	10	0	the cwt (112 lb)	£1.50	
Madder	1	10	0	the cwt (112 lb)	£1.50	
Malt	0	5	0	the quarter	£0.25	This was the rate when prices were high (exceeding 3s 6d the bushel), the normal rate was 3s 4d the bushel.

Commodity	£	s.	d.	unit	£mod	Notes
Masts	0	10	0	the mast	£0.50	Assuming Middle Mast, not Great or Small.
Meal (wheat or rye)	3	0	0	the last (12 barrels)	£3.00	
Molasses	13	6	8	the ton	£13.33	
Nuts	0	10	0	the barrel	£0.50	Assuming small nuts, not walnuts.
Oakum	0	10	0	the cwt (112 lb)	£0.50	
Oats	0	4	0	the quarter (8 bushels)	£0.20	
Oil, Trayne	6	0	0	the ton	£6.00	
Old Metal	7	0	0	the ton	£7.00	No specific rate is listed for this, so I have used the one for Iron.
Olives	8	0	0	the hogshead	£8.00	
Oranges	1	0	0	the thousand	£1.00	(Oranges and Lemons)
Oil	32	0	0	the ton	£32.00	
Paper	0	4	6	the ream	£0.23	
Peas	0	4	0	the quarter (8 bushels)	£0.20	
Pelts	0	0	3	the skin	£0.01	
Pitch	2	10	0	the last (12 barrels)	£2.50	Assuming it is all Small Band
Plates	2	0	0	the barrel (300 plates)	£2.00	Assuming single, white or black.
Plates (double)	1	6	8	the hundred plates	£1.33	Assuming white or black.
Plates (single, white or black)	2	0	0	the barrel (300 plates)	£2.00	
Pork	6	0	0	the ton	£6.00	
Potts	3	0	0	the dozen	£3.00	Assuming Iron, as they are measured in dozens, not hundreds.
Prunes	0	15	0	the cwt (112 lb)	£0.75	
Raisins	2	0	0	the cwt (112 lb)	£2.00	
Rice	1	6	8	the cwt (112 lb)	£1.33	
Rozin	0	6	8	the cwt (112 lb)	£0.33	
Salt, French	0	0	6	the bushel	£0.03	
Salt, Spanish	0	0	8	the bushel	£0.03	

Commodity	£	s.	d.	unit	£mod	Notes
Shruffe	3	0	0	the cwt (112 lb)	£3.00	
Skins	0	0	3	the skin	£0.01	
Skins, Coney	0	0	4	the hundred	£0.02	I could not find this in the 1675 Book of Rates, so have taken the rate charged in 1638.
Skins, Kid	1	0	0	the hundred (5 score)	£1.00	
Skins, Sheep	0	0	3	the skin	£0.01	
Smalls	0	1	6	the pound	£0.08	
Soap	3	0	0	the cwt (112 lb)	£3.00	
Spars (small)	1	0	0	the cwt (six score)	£1.00	
Spirits	5	6	8	the barrel	£5.33	There is no value for 'spirrits', so I have used the one for Aquavita.
Starch	5	0	0	the cwt (112 lb)	£5.00	
Staves, Barrel	0	3	4	the hundred (6 score)	£0.17	
Staves, Hogshead and Barrel	0	6	8	the hundred (6 score)	£0.33	
Staves, Pipe	0	6	8	the hundred (6 score)	£0.33	
Steele	1	10	0	the cwt (112 lb)	£1.50	
Stone Bottles	0	5	0	the dozen	£0.25	Earth, not stone but probably similar. Has become stone by 1675.
Succads	0	3	0	the pound	£0.15	
Sugar	1	10	0	the cwt (112 lb)	£1.50	Assuming brown unless otherwise stated, as this is the type predominantly imported in the 1670s. Where possible the quantity has been calculated from the volume listed in the Wharfage Book (puncheons, hogsheads, etc...) following the conversion rates listed in Appendix 2.2 and assuming that there are 2240 lb. in a ton (and therefore 20 cwt). Where non-specific measures are listed (e.g. chests) the wharfage duty (8 d. per ton) has been used to determine the volume.
Sugar, Muscovadoes	4	0	0	the cwt (112 lb)	£4.00	
Sugar, Panelles	2	0	0	the cwt (112 lb)	£2.00	

Commodity	£	s.	d.	unit	£mod	Notes
Sugar, White	7	6	8	the cwt (112 lb)	£7.33	Not from the English Plantations.
Tallow	0	16	8	the cwt (112 lb)	£0.83	
Tar	2	10	0	the last (12 barrels)	£2.50	Assuming Small Band.
Tar, Great Band	2	10	0	the last (12 barrels)	£2.50	
Tobacco	0	1	8	the pound	£0.08	Where possible the quantity has been calculated from the volume listed in the Wharfage Book (puncheons, hogsheads, etc...) following the conversion rates listed in Appendix 2.2 and assuming that there are 2240 lb. in a ton Where non-specific measures are listed (e.g. bales) the wharfage duty (8 d. per ton) has been used to determine the volume.
Vinegar	5	0	0	the ton	£5.00	
Walnuts	0	6	8	the barrel	£0.33	
Wheat	0	6	8	the quarter	£0.33	This was the rate when prices were high (exceeding 5s 6d the bushel), the normal rate was 5s the bushel.
Wine				the ton	£16.00	
Wine Lees	4	0	0	the ton	£4.00	
Wool	3	0	0	the cwt (112 lb)	£3.00	Wool in fact paid no duty in 1675, so the 1642 value has been adopted.
Wool, Spanish	3	0	0	the cwt (112 lb)	£3.00	Wool in fact paid no duty in 1675, so the 1642 value has been adopted.
Yarn, Linen	0	1	0	the pound	£0.05	

Appendix 3.2

Comparison of pre-1642 and post-1660 Customs Rates:[1]

Commodity	Measure	pre-1642			post-1660			%
		£	s	d	£	s	d	Increase
Aquavita	the hogshead	4	0	0	4	0	0	100
Battery	the C (112lb)	3	0	0	9	0	0	300
Canvas, Vittery	100 ells (6 score)	3	6	8	5	0	0	150
Cloth, Dowlas	the peece (106 ells)	3	6	8	5	0	0	150
Cloth, Frise	the ell	0	0	16	0	5	0	375
Currants	the C (112lb)	0	30	0	6	0	0	400
Figgs	the C (112lb)	0	16	8	1	13	6	201
Fish, Herrings White	the last (12 barrels)	5	0	0	5	0	0	100
Hemp, Rough	the C (112lb)	0	13	4	0	13	4	100
Honey	the barrel	0	30	0	2	0	0	133
Oyle	the ton	16	0	0	32	0	0	200
Paper, Coppy	the ream	0	2	6	0	4	6	180
Prunes	the C (112lb)	0	10	0	0	15	0	150
Raisons, Great	the C (112lb)	0	13	4	1	10	0	225
Raisons, of the Sun	the C (112lb)	0	18	0	2	0	0	222
Soap, Castile	the C (112lb)	0	33	4	3	0	0	180
Sugar Brown/Muscovadoes (plantations)	the C (112lb)	3	6	8	1	10	0	45
Sugar, White (plantations)	the C (112lb)	3	6	8	5	0	0	150
Tallow	the C (112 lb)	0	16	8	0	16	8	100
Tobacco	the pound	0	5	0	0	1	8	33

[1] '1635 Book of Rates'; '1675 Book of Rates'.

Appendix 3.3

1 - Bristol's Imports as Recorded in the Wharfage Books, 1654/5-1664/5 (in pounds Sterling):[1]

1654/5	1659/60	1664/5
293,325	238,339	483,729

2 - Bristol's Imports as Recorded in the Wharfage Books, 1654-1665 (tons):[2]

1654	1,043
1655	2,882
1656	1,972
1657	1,977
1658	2,302
1659	2,223
1660	2,452
1661	2,752
1662	3,108
1663	3,727
1664	3,957
1665	5,202

[1] BRO SMV/7/1/1/1; SMV/7/1/1/2.
[2] BRO SMV/7/1/1/1; SMV/7/1/1/2. I am deeply grateful to Jonathan Harlow for providing me with the data from which these figures were derived.

Appendix 3.4

1 - Bristol's Imports by Country of Origin as Recorded in the Wharfage Books, 1654/5-1664/5 (in pounds sterling):[1]

	1654/5	1659/60	1664/5
France	11,242	13,486	16,268
Greece	-	19,080	18,528
Iberian Peninsula	-	-	35,340
Ireland	6,789	8,690	22,601
Netherlands	7,789	2,759	900
North America	83,368	111,600	335,501
Portugal	16,722	19,275	-
Spain	40,664	21,493	-
West Indies	121,849	36,539	54,591
Other	4,904	5,416	10,204

2 - Bristol's Imports of Tobacco and Sugar as Recorded in the Wharfage Books, 1654/5-1664/5:[2]

	1654/5	1659/60	1664/5
Tobacco (lb)	1,945,250	1,486,240	4,232,272
Sugar (cwt)	21,427	13,209	33,053

3 - Bristol's American Imports by Commodity as Recorded in the Wharfage Books, 1654/5-1664/5 (in pounds sterling):[3]

	1654/5	1659/60
Beef	-	48
Cotton Wool	103	506
Fish	117	62
Ginger	14,202	1,941
Indigo	1,538	700
Skins, Sheep	38	-
Spirits	405	-
Sugar	29,736	18,326
Sugar, Panelles	3,205	1,983
Tallow	17	160
Tobacco	155,620	123,853
Train Oil	-	216
Wool	63	405

[1] BRO SMV/7/1/1/1; SMV/7/1/1/2
[2] BRO SMV/7/1/1/1; SMV/7/1/1/2.
[3] BRO SMV/7/1/1/1; SMV7/1/1/2.

Appendix 4.1

Comparison of Pre- and Post-Civil War Customs Rates on Exported Goods:[1]

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Alabaster	the load		40		£ 2.00	2	0	0	£ 2.00	-
Allum English	the cwt (112lb)	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Anvils	the cwt (112lb)	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Apples	the bushell	0	0	12	£ 0.05	0	1	0	£ 0.05	-
Apples, Pippind	the bushell	0	2	0	£ 0.10	0	1	0	£ 0.05	- 50
Aqua Vitae	the hogshead	4	0	0	£ 4.00	2	0	0	£ 2.00	- 50
Ashes of English Wood	the last (12 Barrels)	0	16	0	£ 0.80	1	13	4	£ 1.67	108
Bacon	the flitch	0	6	8	£ 0.33	0	10	0	£ 0.50	50
Baggs	the dozen	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Bayes, Double	the peece	4	0	0	£ 4.00	2	0	0	£ 2.00	- 50
Bayes, Minkin	the peece	6	0	0	£ 6.00	3	0	0	£ 3.00	- 50
Bayes, Single	the peece	0	40	0	£ 2.00	1	0	0	£ 1.00	- 50
Beef	the barrel	0	40	0	£ 2.00	3	0	0	£ 3.00	50
Beer Eager	the ton	0	40	0	£ 2.00	1	0	0	£ 1.00	- 50
Bell Metall	the cwt (112lb)	0	40	0	£ 2.00	4	0	0	£ 4.00	100
Bellowes	the dozen	0	12	0	£ 0.60	0	6	0	£ 0.30	- 50
Billets	the thousand	0	13	4	£ 0.67	2	0	0	£ 2.00	200
Birdlime	the cwt (112lb)	0	30	0	£ 1.50	1	10	0	£ 1.50	-
Bones, Ox	the thousand	0	6	8	£ 0.33	0	6	8	£ 0.33	-
Brushes, English Heath	the dozen	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Buck Leather	the dozen	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Buck Wheat	the quarter	0	20	0	£ 1.00	0	10	0	£ 0.50	- 50

[1] '1635 Book of Rates'; '1675 Book of Rates'

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Butter, Corrupt	the barrel	0	33	4	£ 1.67	3	0	0	£ 3.00	80
Butter, Good	the barrel	0	50	0	£ 2.50	3	0	0	£ 3.00	20
Buttons of Hair	small gross, 12 dozen	0	0	12	£ 0.05	0	0	6	£ 0.03	- 50
Calve Skins	the dozen	0	12	0	£ 0.60	2	1	0	£ 2.05	242
Candles	the dozen pound	0	6	0	£ 0.30	0	5	0	£ 0.25	- 17
Candles	the barrel (10 dozen pound)	3	0	0	£ 3.00	2	10	0	£ 2.50	- 17
Canvas, English Tufted	the peece	0	16	8	£ 0.83	0	10	0	£ 0.50	- 40
Capps, Black Wool		0	20	0	£ 1.00	0	10	0	£ 0.50	- 50
Capps, Buttoned English		0	16	8	£ 0.83	0	8	4	£ 0.42	- 50
Capps, Monmouth Trimmed		0	24	0	£ 1.20	0	12	0	£ 0.60	- 50
Capps, Monmouth Plain		0	12	0	£ 0.60	0	6	0	£ 0.30	- 50
Card Boards (small)	the groce (12 dozen)	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Cards, Stock	the dozen	0	24	0	£ 1.20	1	4	0	£ 1.20	-
Cards, Tow	the dozen	0	5	0	£ 0.25	0	5	0	£ 0.25	-
Cards, Wool New	the dozen	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Cards, Wool Old	the dozen	0	6	0	£ 0.30	0	6	0	£ 0.30	-
Carpets, Northern	the peece	0	23	4	£ 1.17	0	11	8	£ 0.58	- 50
Cathlings, or English Hat Makers Strings	the groce (12 dozen)	0	16	0	£ 0.80	0	16	0	£ 0.80	-
Cheese	the cwt (112lb)	0	14	0	£ 0.70	1	0	0	£ 1.00	43
Cloak Bags	the dozen	0	30	0	£ 1.50	0	15	0	£ 0.75	- 50
Coals	the chaulder (London measure)	0	13	4	£ 0.67	5	0	0	£ 5.00	650
Coals	the chaulder (newcastle measure)	0	13	4	£ 0.67	8	0	0	£ 8.00	1,100
Cobweb Lawns	the yard	0	2	0	£ 0.10	0	0	8	£ 0.03	- 67
Coney Hair or Wool, Black or White	the pound	0	0	12	£ 0.05	0	0	6	£ 0.03	- 50
Cordage	the C (112lb)	0	16	8	£ 0.83	0	10	0	£ 0.50	- 40
Cottons (Northern, Manchester & Taunton)	the hundred goads	4	0	0	£ 4.00	2	0	0	£ 2.00	- 50

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Coverlets (caddas)	the peece	0	2	6	£ 0.13	0	1	3	£ 0.06	- 50
Coverlets (wool & hair)	the peece	0	3	4	£ 0.17	0	1	8	£ 0.08	- 50
Cushions of Yorkshire	the dozen	0	40	0	£ 2.00	1	0	0	£ 1.00	- 50
Darnix (English)	the yard	0	0	18	£ 0.08	0	0	9	£ 0.04	- 50
Darnix Coverletts English)	the peece	0	6	8	£ 0.33	0	3	4	£ 0.17	- 50
Dimity	the yard	0	0	8	£ 0.03	0	0	4	£ 0.02	- 50
Emery Stones	the cwt (112lb)	0	4	0	£ 0.20	0	3	4	£ 0.17	- 17
Fennel Seed	the cwt (112lb)	0	30	0	£ 1.50	1	10	0	£ 1.50	-
Figurettoes, Broad	the peece	0	20	0	£ 1.00	1	10	0	£ 1.50	50
Figurettoes, Narrow	the peece	0	10	0	£ 0.50	0	15	0	£ 0.75	50
Flannel	the yard	0	0	9	£ 0.04	0	0	4.5	£ 0.02	- 50
Flax	the cwt (112lb)	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Flitches of Timber	40 skins	0	6	8	£ 0.33	1	13	4	£ 1.67	400
Freezes	the yard	0	0	12	£ 0.05	0	0	6	£ 0.03	- 50
Fringed and Flitched with Silk	the dozen pair	0	6	8	£ 0.33	0	6	8	£ 0.33	-
Furred with Coney wool	the dozen pair	0	6	8	£ 0.33	0	6	8	£ 0.33	-
Gartering of Cruell	the groce (12 dozen)	0	16	8	£ 0.83	0	8	4	£ 0.42	- 50
Garters of Worsted	the groce (12 dozen)	0	5	0	£ 0.25	0	2	6	£ 0.13	- 50
Girdles for Children	the groce (12 dozen)	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Girdles of Leather for Men	the groce (12 dozen)	0	16	8	£ 0.83	0	16	8	£ 0.83	-
Glass, Broken	the barrel	0	3	4	£ 0.17	0	3	4	£ 0.17	-
Glew English	the cwt (112lb)	0	16	8	£ 0.83	0	16	8	£ 0.83	-
Glovers Clippings	the fat or maund	0	40	0	£ 2.00	2	0	0	£ 2.00	-
Gloves, Plain of Sheep, Kid or Lambs Leather	the dozen pair	0	4	0	£ 0.20	0	4	0	£ 0.20	-
Goose Quills	the thousand	0	2	0	£ 0.10	0	2	0	£ 0.10	-
Grindlestones	the chaulder	0	13	4	£ 0.67	0	13	4	£ 0.67	-

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Gutts, Ox	the barrel	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Hair Cloth	the peece	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Hair, Harts	the cwt (112lb)	0	32	0	£ 1.60	1	12	0	£ 1.60	-
Hair, Horse	the cwt (112lb)	0	40	0	£ 2.00	6	0	0	£ 6.00	200
Hair, Ox or Cow	the cwt (112lb)	0	20	0	£ 1.00	2	0	0	£ 2.00	100
Hakefish	the hundred (6 score)	0	3	4	£ 0.17	0	3	4	£ 0.17	-
Harts Horn	the cwt (112lb)	0	32	0	£ 1.60	1	12	0	£ 1.60	-
Hatbands of Cruell	the groce (12 dozen)	0	10	0	£ 0.50	0	5	0	£ 0.25	- 50
Hawks Hoods	the dozen	0	2	6	£ 0.13	0	2	6	£ 0.13	-
Herrings, Red Full	the last (20 cades)	6	0	0	£ 6.00	6	0	0	£ 6.00	-
Herrings, Red Full	the cade (500)	0	6	0	£ 0.30	0	6	0	£ 0.30	-
Herrings, Summer Herrings, Shotten, Red	the last (20 cades)	3	0	0	£ 3.00	3	0	0	£ 3.00	-
Herrings, Summer Herrings, Shotten, Red	the cade (500)	0	3	0	£ 0.15	0	3	0	£ 0.15	-
Herrings, Summer Herrings, Shotten, White Packed	the barrel	0	6	8	£ 0.33	0	6	8	£ 0.33	-
Herrings, Summer Herrings, Shotten, White Packed	the Last (12 Barrels)	4	0	0	£ 4.00	4	0	0	£ 4.00	-
Herrings, Summer Herrings, Shotten, White Unpacked	the last (18 barrels)	4	0	0	£ 4.00	4	0	0	£ 4.00	-
Herrings, White, Full, Packed	the barrel	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Herrings, White, Full, Packed	the Last (12 Barrels)	8	0	0	£ 8.00	8	0	0	£ 8.00	-
Herrings, White, Full, Unpacked	the last (18 barrels)	8	0	0	£ 8.00	8	0	0	£ 8.00	-
Herrings, White, Shotten Packed	the barrel	0	6	8	£ 0.33	0	6	8	£ 0.33	-
Herrings, White, Shotten Packed	the Last (12 Barrels)	4	0	0	£ 4.00	4	0	0	£ 4.00	-
Herrings, White, Shotten Unpacked	the last (18 barrels)	4	0	0	£ 4.00	4	0	0	£ 4.00	-
Herrings, Winter Herrings (Red) Shott	the last (20 cades)	3	0	0	£ 3.00	3	0	0	£ 3.00	-
Herrings, Winter Herrings (Red) Shott	the cade (500)	0	3	0	£ 0.15	0	3	0	£ 0.15	-

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Hoops for Barrels	the thousand	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Horns for Lanthornes	the thousand leaves	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Horns, Blowing Horns Small	the dozen	0	4	0	£ 0.20	0	4	0	£ 0.20	-
Horns, Bucks	the cwt	0	4	0	£ 0.20	0	4	0	£ 0.20	-
Horns, Ox	the thousand	0	50	0	£ 2.50	2	10	0	£ 2.50	-
Horns, Powder	the dozen	0	4	0	£ 0.20	0	4	0	£ 0.20	-
Horns, Rams	the thousand	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Horns, Sheep	the thousand	0	3	4	£ 0.17	0	3	4	£ 0.17	-
Horns, Shooing	the dozen	0	0	8	£ 0.03	0	0	8	£ 0.03	-
Horns, Staggs	the thousand	0	20	0	£ 1.00	1	12	0	£ 1.60	60
Horns, Tipps of	the cwt	0	15	0	£ 0.75	0	15	0	£ 0.75	-
Horse Collars	the hundred (5 score)	0	40	0	£ 2.00	2	0	0	£ 2.00	-
Horse Tails, with Hair	the C (5 score)	0	40	0	£ 2.00	4	0	0	£ 4.00	100
Horses, Geldings or Nags	the peece	6	13	4	£ 6.67	20	0	0	£ 20.00	200
Horses, Stone Horses	the peece	6	13	4	£ 6.67	66	13	4	£ 66.67	900
Irish Mantles	the Mantle	0	6	8	£ 0.33	0	3	4	£ 0.17	- 50
Iron	the ton	8	0	0	£ 8.00	16	0	0	£ 16.00	100
Iron Ordinance	the cwt (112lb)	0	20	0	£ 1.00	2	0	0	£ 2.00	100
Iron, Old	the ton	8	0	0	£ 8.00	16	0	0	£ 16.00	100
Lace, Gold and Silver	the pound	0	36	0	£ 1.80	1	16	0	£ 1.80	-
Lamperns	the thousand	0	26	8	£ 1.33	1	6	8	£ 1.33	-
Lead Uncast	the fodder (20 hundred weight)	9	0	0	£ 9.00	20	0	0	£ 20.00	122
Lead, Cast	the fodder (20 hundred weight)	8	0	0	£ 8.00	20	0	0	£ 20.00	150
Letharge of Lead	the cwt (112lb)	0	4	0	£ 0.20	0	4	0	£ 0.20	-
Lime	the chaulder	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Linnen Shreds	the fat or maund	0	40	0	£ 2.00	2	0	0	£ 2.00	-

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Linseed	the quarter (8 bushells)	0	20	0	£ 1.00	3	0	0	£ 3.00	200
Lists of Cloth	the thousand yards	3	0	0	£ 3.00	1	10	0	£ 1.50	- 50
Loom-work	the yard	0	0	12	£ 0.05	0	0	6	£ 0.03	- 50
Mares	the mare	6	13	4	£ 6.67	126	13	4	£126.67	1,800
Mustard Seed	the cwt (112lb)	0	5	0	£ 0.25	0	10	0	£ 0.50	100
Nails	the cwt (112lb)	0	6	8	£ 0.33	0	5	0	£ 0.25	- 25
Nutts, Small	the barrel (3 bushells)	0	6	8	£ 0.33	0	6	8	£ 0.33	-
Oatmeal	the bushell	0	3	4	£ 0.17	0	3	4	£ 0.17	-
Oatmeal	the barrel (3 bushells)	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Oil, Train Oil	the ton	8	0	0	£ 8.00	10	0	0	£ 10.00	25
Oaker, Yellow or Red	the cwt (112lb)	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Otter Skins, Raw	the peece	0	0	12	£ 0.05	0	1	0	£ 0.05	-
Otter Skins, Tawed	the peece	0	0	16	£ 0.07	0	1	4	£ 0.07	-
Otter Skins, Wombes	the mantle	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Oysters, Small	the barrel in pickle	0	0	16	£ 0.07	0	1	4	£ 0.07	-
Parchment	the roll	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Past Boards	the groce (12 dozen)	0	12	0	£ 0.60	0	12	0	£ 0.60	-
Pilchers	the ton	4	0	0	£ 4.00	20	0	0	£ 20.00	400
Points of Leather	the small groce (12 dozen)	0	0	18	£ 0.08	0	0	6	£ 0.03	- 67
Purls of Broad Cloth	the piece	0	0	4	£ 0.02	0	0	2	£ 0.01	- 50
Rape Cakes	the thousand	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Rape Seed	the quarter (8 bushells)	0	20	0	£ 1.00	3	0	0	£ 3.00	200
Ruffeting for Painters	the cwt (112lb)	0	5	0	£ 0.25	0	5	0	£ 0.25	-
Ruggs, Irish Ruggs	the yard	0	0	8	£ 0.03	0	0	4	£ 0.02	- 50
Ruggs, Irish Ruggs for Bedds	the rugg	0	13	4	£ 0.67	0	6	8	£ 0.33	- 50
Sack Cloth	the peece	0	10	0	£ 0.50	0	10	0	£ 0.50	-

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Sadle Trees	the dozen	0	6	8	£ 0.33	0	3	4	£ 0.17	- 50
Saffron	the pound	0	20	0	£ 1.00	1	10	0	£ 1.50	50
Salt-petre	the cwt (112lb)	0	33	4	£ 1.67	4	0	0	£ 4.00	140
Seahorse Teeth	the pound	0	3	4	£ 0.17	0	3	4	£ 0.17	-
Sheep and Lamb Skins, Drest in Oyle		0	53	4	£ 2.67	2	10	0	£ 2.50	- 6
Sheep and Lamb Skins, Pelts		0	26	8	£ 1.33	3	6	8	£ 3.33	150
Sheep and Lamb Skins, Tawed with the Wool		0	30	0	£ 1.50	3	0	0	£ 3.00	100
Shovels, Shod	the dozen	0	8	0	£ 0.40	0	4	0	£ 0.20	- 50
Shovels, Unshod	the dozen	0	6	8	£ 0.33	0	3	4	£ 0.17	- 50
Shreds and Peeces of Broadcloth	the pound	0	0	12	£ 0.05	0	0	6	£ 0.03	- 50
Silk, English Thrown	the pound (16 ounces)	0	6	8	£ 0.33	0	3	4	£ 0.17	- 50
Skins Coney Grey Stag	the cwt (6 score)	0	3	4	£ 0.17	0	10	0	£ 0.50	200
Skins Coney, Grey Tawed	the cwt (6 score)	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Skins, Badger	the peece	0	0	12	£ 0.05	0	1	0	£ 0.05	-
Skins, Cat	the cwt	0	26	8	£ 1.33	1	6	8	£ 1.33	-
Skins, Coney Black with Silver Hairs or Without	the cwt (6 score)	0	54	4	£ 2.72	2	13	4	£ 2.67	- 2
Skins, Coney Grey Seasoned	the cwt (6 score)	0	6	8	£ 0.33	1	0	0	£ 1.00	200
Skins, Coney Tawed and Dyed into Colours	the hundred (120)	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Skins, Dogs	the dozen	0	2	6	£ 0.13	0	2	6	£ 0.13	-
Skins, Elk Raw	the peece	0	10	0	£ 0.50	1	0	0	£ 1.00	100
Skins, Fox	the peece	0	0	8	£ 0.03	0	0	8	£ 0.03	-
Skins, Hare	the peece	0	0	3	£ 0.01	0	0	3	£ 0.01	-
Skins, Kid Drest	the cwt (5 score)	0	13	4	£ 0.67	0	13	4	£ 0.67	-
Skins, Kid in Hair	the cwt (5 score)	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Skins, Lambskins Morkins Untawed with the Wooll	the cwt (6 score)	0	16	8	£ 0.83	0	6	8	£ 0.33	- 60
Skins, Lambskins, Morkins Tawed	the cwt (6 score)	0	10	0	£ 0.50	0	16	8	£ 0.83	67

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Skins, Rabbit Black	the cwt	0	15	0	£ 0.75	0	15	0	£ 0.75	-
Skins, Squirrel	the thousand	0	50	0	£ 2.50	2	10	0	£ 2.50	-
Skins, Swan	the peece	0	2	6	£ 0.13	0	2	6	£ 0.13	-
Skins, Wolf Tawed	the peece	0	6	0	£ 0.30	0	6	0	£ 0.30	-
Soap, Hard English Making	the cwt	0	26	8	£ 1.33	0	10	0	£ 0.50	- 63
Soap, Hard English Making	the barrel	0	53	4	£ 2.67	1	0	0	£ 1.00	- 63
Sprats	the cade (1000)	0	2	0	£ 0.10	0	1	8	£ 0.08	- 17
Starch	the cwt (112lb)	0	16	8	£ 0.83	1	0	0	£ 1.00	20
Steel, Gad	the cwt (112lb)	0	12	0	£ 0.60	1	0	0	£ 1.00	67
Stockings, Irish	the dozen	0	10	0	£ 0.50	0	5	0	£ 0.25	- 50
Stockings, Kersey Long	the pair	0	3	4	£ 0.17	0	1	3	£ 0.06	- 63
Stockings, Kersey Short	the dozen pair	0	10	0	£ 0.50	0	3	9	£ 0.19	- 63
Stones, Hilling	the thousand	0	3	4	£ 0.17	0	3	4	£ 0.17	-
Stones, Slate	the thousand	0	10	0	£ 0.50	0	15	0	£ 0.75	50
Tallow	the cwt (112lb)	0	20	0	£ 1.00	2	0	0	£ 2.00	100
Thrums	the hundred (5 score pound)	0	26	8	£ 1.33	0	13	4	£ 0.67	- 50
Tinn, Unwrought	the cwt (112lb)	0	46	8	£ 2.33	7	6	8	£ 7.33	214
Tinn, Wrought (pewter)	the cwt (112lb)	0	53	4	£ 2.67	5	0	0	£ 5.00	88
Tobacco Pipes	the small groce (12 dozen)	0	0	12	£ 0.05	0	1	0	£ 0.05	-
Velures, English	the single peece (7 yards)	0	20	0	£ 1.00	0	10	0	£ 0.50	- 50
Velures, English	the double peece (15 yards)	0	40	0	£ 2.00	1	0	0	£ 1.00	- 50
Vinegar of Wine	the ton	0	46	8	£ 2.33	2	6	8	£ 2.33	-
Virginals	the pair	0	33	4	£ 1.67	1	0	0	£ 1.00	- 40
Wadmoll	the yard	0	0	9	£ 0.04	0	0	4.5	£ 0.02	- 50
Wax, English	the cwt	4	0	0	£ 4.00	6	0	0	£ 6.00	50
Wax, English Hard	the pound	0	2	0	£ 0.10	0	2	0	£ 0.10	-

Commodity	Quantity	1635				1675				% Increase
		£	s	d	£mod	£	s	d	£mod	
Weld	the cwt (112lb)	0	10	0	£ 0.50	1	5	0	£ 1.25	150
Whale Finns	the groce (12 dozen)	0	4	0	£ 0.20	0	2	0	£ 0.10	- 50
White or Black Tawed	the cwt (6 score)	0	30	0	£ 1.50	1	10	0	£ 1.50	-
White or Black Untawed	the cwt (6 score)	0	20	0	£ 1.00	1	6	8	£ 1.33	33
Wine Lees	the butt	0	20	0	£ 1.00	1	0	0	£ 1.00	-
Woad, English	the ton	10	0	0	£10.00	15	0	0	£ 15.00	50
Woadnetts	the cwt (5 score)	0	10	0	£ 0.50	0	10	0	£ 0.50	-
Wood, Box	the ton	4	0	0	£ 4.00	4	0	0	£ 4.00	-
Wood, Gambray Wood	the cwt (112lb)	0	4	6	£ 0.23	1	4	5	£ 1.22	443
Wood, Redwood	the cwt (112lb)	0	15	0	£ 0.75	1	10	0	£ 1.50	100
Worsteds, Broad English	the peece	0	40	0	£ 2.00	1	0	0	£ 1.00	- 50
Worsteds, Narrow English	the peece	0	30	0	£ 1.50	0	15	0	£ 0.75	- 50
Yarn, Grograine	the pound	0	53	0	£ 2.65	0	4	0	£ 0.20	- 92

Appendix 4.2

1 - Bristol's Overseas Trade as Recorded in the Port Books, 1670/1-1687/8 (in pounds sterling):[1]

	Imports	Exports
1670/1	421,793	-
1671/2	566,722	31,978
1677/8	604,447	-
1678/9	-	42,032
1679/80	456,118	36,651
1680/1	444,315	47,720
1681/2	490,344	44,772
1682/3	492,316	44,772
1684/5	-	42,252
1686/7	502,460	43,580
1687/8	-	39,307

2 - Bristol's Imports as Recorded in the Wharfage Books, 1665-89 (tons):[2]

1665	5,202	**1684**	4,526
1666	3,251	**1685**	4,613
1667	2,819	**1686**	4,901
1668	4,429	**1687**	4,785
1669	3,850	**1688**	4,788
1670	4,074	**1689**	4,033
1671	4,155		
1672	4,014		
1673	4,069		
1674	5,687		
1675	5,562		
1676	4,747		
1677	4,850		
1678	4,530		
1679	4,236		
1680	3,786		
1681	4,253		
1682	4,333		
1683	4,608		

[1] TNA PRO E190/1137/3; E190/1138/1; E190/1139/2; E190/1140/2; E190/1144/1; E190/1144/1; E190/1146/1; E190/1147/2; E190/1148/1; E190/1149/1.

[2] BRO SMV/7/1/1/3; SMV/7/1/1/4; SMV/7/1/1/5; SMV/7/1/1/6; SMV/7/1/1/7; SMV/1/1/8; SMV/1/1/9; SMV/1/1/10; SMV/1/1/11; SMV/1/1/12; SMV/1/1/13; SMV/1/1/14. I am deeply grateful to Jonathan Harlow for providing me with the data from which these figures were derived.

Appendix 4.3

Bristol's Imports by Country of Origin as recorded in the Port Books, 1670/1 and 1671/2 (in pounds sterling):[1]

	1670/1	1671/2
American Mainland	204,851	394,318
France	40,912	22,968
Germany	363	-
Greece	20,181	18,495
Iceland	8	-
Ireland	10,877	14,785
Italy	1,334	1,998
Latvia	544	-
Netherlands	5,956	1,465
Newfoundland	317	308
Norway	226	300
Overland	28	-
Portugal	47,076	15,445
Scotland	1,214	1,474
Sweden	302	-
Spain	39,412	36,381
Unknown	870	211
West Indies	47,323	66,695

[1] TNA PRO E190/1137/3; E190/1138/1.

Appendix 4.4

1 - Bristol's American Imports by Commodity as Recorded in the Port Books, 1670/1 and 1671/2 (in pounds sterling):[1]

	1670/1	1671/2
Ginger	569	926
Indigo	375	1,585
Other	748	1,502
Sugar, Brown	43,692	54,749
Sugar, White	1,928	1,695
Tobacco	204,862	400,556

2 - Bristol's Imports of Tobacco and Sugar as Recorded in the Port Books, 1670/1 and 1671/2:[2]

	1670/1	1671/2
Tobacco (lb)	2,561,803	5,006,949
Sugar (cwt)	29,514	36,909

3 - Bristol's American Exports by Commodity as Recorded in the Port Books, 1671/2 (in pounds sterling):[3]

	1671/2
Alum, English	1
Anchovas	4
Anvil	1
Aquavita	60
Bacon	41
Bags	5
Barrel Hoops	1
Beef	33
Beer	167
Bellows	0.2
Biskett	29
Blankets	3
Bodices	3
Books	0.3
Bottles, Glass English	6
Brass Manufacture	10
Bread	3

[1] TNA PRO E190/1137/3; E190/1138/1.
[2] TNA PRO E190/1137/3; E190/1138/1.
[3] TNA PRO E190/1138/1.

	1671/2
Bridles	2
Butter	110
Candles	306
Caps	3
Cart Wheels	7
Catameale	2
Chairs	6
Cheese	61
Cloth, Bayes Double	47
Cloth, Bayes Minkin	10
Cloth, Bayes Single	11
Cloth, Bodticke English	1
Cloth, Broad	3
Cloth, Calico	4
Cloth, Canvas	33
Cloth, Carpeting	7
Cloth, Cobb Webland	1
Cloth, Cotton	136
Cloth, Darnix	2
Cloth, Dowlas	22
Cloth, English Reds	1
Cloth, Flannel	6
Cloth, Frieze	45
Cloth, Fustian English	6
Cloth, Hair Cloth	0.3
Cloth, Indian Stuffs	11
Cloth, Kersey	78
Cloth, Linen Blue	27
Cloth, Linen Coloured	3
Cloth, Linen Dyed	2
Cloth, Linen English Flaxen	17
Cloth, Linen English Made	6
Cloth, Linen Narrow Coloured	5
Cloth, Linsey Woolsey	5
Cloth, Norwich Stuffs	49
Cloth, Pennistones	3
Cloth, Plaines	2
Cloth, Rugs Irish	56
Cloth, Sackcloth	2
Cloth, Serge	313
Cloth, Short Cloth	93
Cloth, Sickinge English	0.4
Cloth, Silk English Throne	2

	1671/2
Cloth, Spanish	4
Cloth, Tammy	2
Cloth, Tirkin English	6
Cloth, Welsh Plaines	1
Cloth, Worsted Stuff	5
Coal	251
Cockles	2
Copper Manufacture	12
Cordage	11
Coverlets of Wool and Hair	5
Currance	6
Earthen Wares, English	0.2
Feather Bed Bolster	4
Flock Beds and Bolsters	5
Flower	7
Girts?	0.3
Glass, Window	9
Glasses, Drinking English	1
Gloves, Sheepskin	7
Grind stones	1
Grindstone	0.2
Gunpowder	2
Haberdashery	3
Hats, Caster and Felt	72
Hats, Felt	36
Holsters	1
Hogshead Hoops	1
Hoops	9
Hops	49
Horse Collars	2
Horses	60
Hose, Children's Woollen	0.2
Iron	2
Iron, Bars	27
Iron, Old	1
Iron, Slow	6
Iron, Wrought	251
Lace, Silver	1
Lead	81
Lead Weights	10
Leather Manufacture	64
Leather, Tanned	0.1
Malt	64

	1671/2
Metheglein	4
Nails	109
Oats	1
Oatmeal	1
Pails, Wooden	1
Paper, White	2
Paving stone	5
Peas	32
Pewter, Wrought	66
Playing Cards	0.04
Pork	2
Rug Feather Bed and Bolster	4
Sacks, Hemp	2
Saddle, Great	0.3
Saddle, Side	7
Saddles, Small	42
Salt, French	7
Salt, White	1
Scales	0.3
Shoes	453
Shot	27
Shovels, Shod	1
Silk Manufacture	28
Skins, Calf Tanned	0.2
Slats	23
Soap, English	48
Stockings, Irish	40
Stockings, Thread	2
Stockings, Woollen Women's	2
Stockings, Woollen	48
Stockings, Woollen Children's	6
Stockings, Woollen Men's	5
Stockings, Worsted	55
Stones, Paving	21
Sugar, English Refined	2
Tobacco Pipes	40
Traces and Harnesses for Horses	2
Vinegar	0.1
Wares	1,653
Wares, Apothecary	1
Wares, Earthen	3
Wares, Haberdashery	45

	1671/2
Wrought	2
Unknown	1

Appendix 5.1

1 - Bristol's Wine Imports as Recorded in the Port Books, 1670/1-1686/7(tuns):[1]

1670/1	1671/2	1677/8	1679/80	1680/1	1681/2	1682/3	1686/7
1,131	668	393	427	488	1,123	1,090	1,034

2 - Bristol's Wine Imports by Country of Origin, 1637/8-1659/60 (tuns):[2]

	1637/8	1654/5	1659/60
France	1,747	231	346
Spain	1,387	701	402
Other	290	84	94

[1] TNA PRO E190/1137/3; E190/1138/1; E190/1139/2; E190/1141/3; E190/1142/3; E190/1144/1; E190/1146/1; E190/1148/1.
[2] TNA PRO E190/1136/10; BRO SMV/7/1/1/1; SMV/7/1/1/2.

Appendix 5.2

1 - Bristol's Imports from France as recorded in the Port Books, 1670/1 and 1671/2 (in pounds sterling):[1]

	1670/1	1671/2
Anchovas	10	-
Aniseeds	6	-
Aquavita	3,857	5,039
Canvas, Normandy	120	-
Canvas, Vittery	6,379	2,257
Capers	125	-
Chestnuts	1	-
Cloth, Cuckrams French	3	-
Cloth, Dowlas	17,385	7,873
Cloth, Frise	19	-
Cloth, Linnen	31	-
Cloth, Poldavy	77	67
Cloth, Tregers	15	-
Feathers	12	-
Fish, Herrings Red	8	-
Grapes	330	-
Gunpowder, Serpentine	13	-
Hemp, Rough	-	39
Honey	745	929
Milstones	8	-
Oakham	28	-
Olives	6	-
Oyle, Provence	800	-
Paper, Copy	1,158	448
Paper, Printing	170	151
Pitch & Rozin	9	68
Plaster of Paris	4	-
Potts, Iron	29	-
Prunes	1,193	385
Raisons, Great	105	75
Raisons, of the Sun	160	-
Rape of Grapes	203	315
Rozin	311	299
Shumack	27	-
Soap	957	-
Sugar, Browne	14	-
Tarr	1	-
Thread, Coloured	2	-

[1] TNA PRO E190/1137/3; E190/1138/1.

	1670/1	1671/2
Thread, French	-	6
Turpentine	5	-
Vinegar	101	45
Walnuts	2	-
Whale Fins	4	-
Wine Lees	16	-
Wine, French	8,967	4,898

2 - Bristol's Exports to France as recorded in the Port Books, 1671/2 (in pounds sterling):[2]

	1671/2
Bacon	25
Beer	2
Bees Wax	108
Biskett	80
Bottles, Glass English	4
Butter	32
Cloth, Bayes Double	22
Cloth, Carpetinge	1
Cloth, Cotton	241
Cloth, Frieze	2
Cloth, Ruggs Irish	21
Cloth, Serge	3
Cloth, Shortcloth	8
Coal	95
Earth, Red	24
Glovers Clippings	5
Lead	1,630
Leather, Tanned	252
Mault	25
Nagg	5
Nails	6
Peas	13
Pewter, Wrought	3
Skins, Calf	156
Skins, Coney	38
Stockings, Worsted	209
Tallow Candles	45

[2] TNA PRO E190/1138/1.

Appendix 5.3

1 - Bristol's Olive Oil Imports as Recorded in the Port Books, 1670/1 and 1671/2 (tons):[1]

1670/1	1671/2
556	516

2 - Bristol's Imports from the Iberian Peninsula as recorded in the Port Books, 1670/1 and 1671/2 (in pounds sterling):[2]

	1670/1	1671/2
Almonds	221	1
Anchovas	25	100
Aniseed	832	219
Argall	237	1
Aquavita	26	-
Baskets	32	13
Brimstones	32	107
Brooms	20	23
Capers	59	-
Carpets, Small	5	-
Chestnuts	4	-
Cloth, Bays Small	15	-
Cheese, Parmesan	-	1
Cocheneele	-	47
Dates	114	-
Feathers for Bedds	29	4
Figs	1,538	2,065
Flowerwater, Oreny	-	7
Gauls	168	-
Hemp	-	4
Hoops, Iron	1	-
Horns, Cow and Ox	-	4
Indico	-	20
Iron, Spanish	435	1,492
Liquorice	3	12
Olem Petriolum	-	8
Olives	67	4
Oil, Olive	22,273	14,533
Paper, Copy	23	99
Potatoes	3	5
Raisins, Denia	3,821	-
Raisons, Great	7,875	5,183

[1] TNA PRO E190/1137/3; E190/1138/1.
[2] TNA PRO E190/1137/3; E190/1138/1.

	1670/1	1671/2
Raisons, of the Sun	8,675	10,273
Rice	505	-
Rozin	40	-
Shumacke	146	139
Skins, Dogfish	-	0.1
Skins, Goat	25	120
Skins, Kid	35	5
Skins, Sheep	16	-
Soap	2,120	145
Sucketts	90	174
Sugar, Denia	10	-
Sugar, Muscovadoes	288	333
Sugar, White	32,285	10,796
Tobacco, Spanish	295	-
Unknown	53	-
Velletts, Coloured	-	33
Walnuts	47	0.3
Whisks	36	30
Wine	47	-
Wine, French	142	-
Wine, Madeira	-	376
Wine, Malaga	492	84
Wine, Portugal	424	503
Wine, Sack	7,574	4,620
Wine, Spanish	162	180
Wood, Brazil	11	-

3 - Bristol's Sugar Imports as Recorded in the Port Books, 1670/1 and 1671/2 (cwt):[3]

	1670/1	1671/2
American (Brown/Muscovadoes)	29,128	36,499
American (White)	386	339
Iberian (Brown/Muscovadoes)	192	222
Iberian (White)	4,403	1,472

4 - Bristol's Exports to the Iberian Peninsula as recorded in the Port Books, 1671/2 (in pounds sterling):[4]

	1671/2
Beer	31

[3] TNA PRO E190/1137/3; E190/1138/1.
[4] TNA PRO E190/1138/1.

	1671/2
Bottles, Glass English	3
Butter	197
Candles, Tallow	50
Cloth, Bayes Double	932
Cloth, Cotton	84
Cloth, Flannel	0.3
Cloth, Kersey	5
Cloth, Norwich Stuffs	5
Cloth, Rugs Irish	11
Cloth, Serge	266
Cloth, Short	18
Glue, English	2
Hoops, Barrel	3
Iron, Wrought	5
Lead	4,643
Leather, Tanned	1,142
Lyme	14
Peas	20
Pepper	30
Pewter, Wrought	40
Skins, Calf Tanned	93
Skins, Sheep Dressed	10
Starch	6
Stockings, Woollen	1
Stockings, Worsted	1,346
Sugar, English Refined	23
Tallow Candles	40
Wares	27

Appendix 5.5

1 - Bristol's Irish Imports by Port as Recorded in the Port Books, 1594/5, 1637/8, and 1671/2 (in pounds sterling):[1]

	1594/5	1637/8	1671/2
Beare Haven	-	167	-
Belfast	-	-	732
Coleraine	-	477	-
Cork	108	2,156	4,108
Crook Haven	-	93	-
Donahada	-	-	150
Drogheda	-	292	-
Dublin		2,770	2,419
Dungarvan	15	427	-
Fethard on Sea	8	-	-
Gallway	10	-	333
Glandore	14	-	-
Killibegs	-	-	111
Kingsayle	172	61	60
Limerick	-	701	464
Londonderry	-	485	2,270
New Ross	-	3,661	-
Slego	-	-	355
Waterford	2,568	8,225	1,878
Wexford	275	814	337
Youghall	232	286	1,486

2 - Bristol's Irish Imports as Recorded in the Port Books, 1670/1 and 1671/2 (in pounds sterling):[2]

	1670/1	1671/2
Aquavita	56	1
Brass	-	3
Brass, Old	16	14
Butter	25	103
Candles	47	12
Candles, Tallow	-	29
Cases, Fox	-	2
Cheese	7	21
Cloth, Frieze	1,401	1,923
Cloth, Linen Irish	1	20

[1] http://hdl.handle.net/1983/1307; TNA PRO E190/1136/10; E190/1138/1.
[2] TNA PRO E190/1137/3; E190/1138/1.

	1670/1	1671/2
Cloth, Rugs Irish	-	8
Cow Tails	1	-
Fat, Dry	-	3
Feathers	9	57
Fish, Hawk	1	7
Fish, Herrings	74	341
Fish, Herrings Red	60	35
Fish, Herrings White	32	52
Fish, Herrings White Salt	-	280
Fish, Salmon White	5	-
Flax, Drest	6	-
Fox Cases	3	-
Gauls	-	34
Glue	4	8
Glovers Clippings	3	-
Hair	21	-
Hair, Cow	-	34
Hair, Horse	-	9
Hides, Cow and Horse	-	5
Hides, in Hair	287	1,085
Hides, Land	35	-
Hides, Mohair	3	-
Hides, Raw	505	98
Hides, Salt in Hair	-	4
Hides, Tanned	216	243
Honey	1	1
Horns	51	39
Horns, Cow	-	13
Horns, Ox	-	3
Horns, Cow & Ox	-	35
Horn Tips	-	5
Horses	220	30
Irish Woollen Parings?	-	27
Iron	11	-
Iron, Cast	-	3
Iron, Spanish	63	39
Leather	-	1
Leather, Sheep's	41	34
Leather, Sheep's Drest	-	27
Leather, Sheep's White	-	296
Leather, Spanish	-	33
Leather, White	193	329
Lignumvita	25	15

	1670/1	1671/2
Nags	30	70
Oatmeal	12	-
Oil, Train	-	359
Oil, Train Pilchard	57	-
Oil, Rape	700	-
Parchment	-	4
Pelts	398	820
Pelts, Drest	-	11
Pelts, Dry	-	25
Pelts, Raw	-	6
Pelts, Sheep's	8	1
Pelts, Undressed	20	51
Pitch	1	-
Posts	8	-
Raisins, of the Sun	-	155
Rape Oil	-	70
Rape Seed	10	-
Shruff	3	-
Shruff, Old	-	2
Skins, Buck and Doe in Hair	-	10
Skins, Calf	5	3
Skins, Calf in Hair	-	3
Skins, Calf Tanned	-	3
Skins, Coney	128	138
Skins, Coney Grey Stag	4	54
Skins, Coney Stagg	-	16
Skins, Cow	-	6
Skins, Deer	5	4
Skins, Deer in Hair	-	6
Skins, Fox	16	18
Skins, Fox Ordinary	-	36
Skins, Goat	13	0.3
Skins, Goat in Hair	213	287
Skins, Kid	7	2
Skins, Kid in Hair	49	55
Skins, Lamb	486	660
Skins, Lamb Drest	-	3
Skins, Lamb in Hair	12	-
Skins, Lamb in Wool	42	-
Skins, Lamb Slinke?	-	76
Skins, Martin	-	10
Skins, Otter	19	39
Skins, Peeces of to Make Glue	-	10

	1670/1	1671/2
Skins, Rabbit	124	130
Skins, Seal	0.3	-
Skins, Sheep	16	33
Skins, Sheep Dressed	21	4
Skins, Sheep in Wool	55	45
Skins, Sheep Tanned	-	2
Skins, to Make Glue	-	10
Slat	-	1
Soap, Bad	-	2
Stockings, Irish	6	6
Stockings, Woollen	-	4
Stockings, Worsted	-	4
Sugar, Brown	-	79
Tails	1	-
Tails, Cow	-	7
Tails, Cow and Ox	-	26
Tails, Horse	2	1
Tallow	4,701	5,618
Tar	3	40
Thrums	10	33
Tobacco	22	83
Tow Cards	-	0.3
Unknown	6	12
Wax, Beef	0.3	-
Yarn, Irish	180	196
Yarn, Irish Woollen	-	5
Yarn, Linen	57	3
Yarn, Woollen	-	58

3 - Bristol's Exports to Ireland as Recorded in the Port Books 1671/2 (in pounds sterling):[3]

	1671/2
Agelico Rooles?	3
Alum	30
Aniseed	8
Apples	9
Aquavita	13
Bacon	14
Bags	1
Barrel Hoops	0.3

[3] TNA PRO E190/1138/1.

	1671/2
Beer	55
Bellows	15
Boards, Pasteboards	0.3
Bodices	1
Bodices of Wrought Iron	2
Books	2
Books, Printed	2
Bottles, Glass English	38
Brass Manufacture	40
Bread	2
Bridles	6
Butter	15
Candles, Tallow	38
Canvas	26
Caps, Monmouth	5
Caps, Red Seaman's	3
Card Boards	4
Cards, Stock	2
Cards, Tow	34
Chairs, Leather	6
Cheese	8
Chests	5
Cloak	7
Cloth, Bayes Double	6
Cloth, Bayes Single	18
Cloth, Bedticke English	2
Cloth, Boulter	1
Cloth, Broad Cloth	2
Cloth, Buckram	2
Cloth, Calico	25
Cloth, Carpeting	11
Cloth, Cotton	55
Cloth, Devon Dozens	7
Cloth, Dunster Dozens	7
Cloth, Flannel	1
Cloth, Frieze	2
Cloth, Fustian English	11
Cloth, Holland Coarse	2
Cloth, Kersey	117
Cloth, Linen Blue	12
Cloth, Linen Coloured	10
Cloth, Linen English Flaxen	5
Cloth, linen English Made	8

	1671/2
Cloth, Linsey Woolsey	24
Cloth, Norwich Stuffs	587
Cloth, Pennistones	33
Cloth, Perpetunas	6
Cloth, Poldavy	1
Cloth, Rugs Irish	46
Cloth, Rushropps	3
Cloth, Say	5
Cloth, Sempitteram	10
Cloth, Serge	274
Cloth, Short Cloth	254
Cloth, Silk and Worsted Stuff	2
Cloth, Silk English Throne	25
Cloth, Spanish Cloth	7
Cloth, Tamy	2
Cloth, Tirkin English	1
Cloth, Worsted Stuff	6
Cloves	1
Coal	190
Cocha	5
Copper Manufacture	1
Copras	3
Cordage	59
Corks for Bottles	1
Currance	5
Curtaines & Vallians, Slipt	1
Earth, Red	26
Earthen Wares, English	6
Frying Pans	1
Gaules	10
Ginger	0.3
Girt Webb	6
Glass	3
Glass, Window	59
Glasses, Drinking	0.2
Glasses, English Drinking	0.4
Glue, English	2
Gloves, Cotton	0.2
Gloves, Lamb Skin	0.2
Gloves, Leather Sheep's	12
Grass seed	3
Grindlestone	2
Gum Arabeck	1

	1671/2
Gun Powder	20
Haberdashery	7
Hats, Caster	42
Hats, Felt	32
Hemp, Drest	3
Holsters	0.1
Hoops, Barrel	13
Hoops	1,664
Horse Collars	0.3
Hour Glasses	0.3
Indico	26
Iron, Bar	16
Iron, Wrought	372
Lace, Cobwebb	0.3
Lace, Silver	22
Lace, Silverport	2
Lanthornes	1
Lead	171
Lead & Shot	587
Lead Ore	2
Lead Weights	12
Lead, Drawn	10
Lead, Uncast	30
Leather Manufacture	11
Leather, Tanned	147
Liquorish	1
Logwood	3
Lyme	0.3
Lymins?	1
Mather	52
Malt	51
Molasses	8
Nag	10
Nails	197
Oaker	0.3
Oaker, Red	3
Oaker, Yellow	2
Oats	2
Oil, Train	3
Oil	7
Oil, Sallet	1
Oil, Seville	3
Oysters, Pickled	1

	1671/2
Paper, Brown	1
Parchment	0.3
Paving Stone	2
Peas	10
Pepper	1
Petticoats	0.04
Pewter	5
Pewter, Wrought	283
Potashes	1
Powder Horns	0.2
Press, Small Wooden	1
Quindlestone?	1
Raisins, of the Sun	8
Redwire?	2
Rusiting for Panelling	0.1
Saddle Trees	3
Saddle, Small	36
Sallet	1
Salt	8
Salt, French	8
Salt, White	21
Seed, Grass French	1
Seeds, Grape	3
Seper? Manufacture	2
Shoe Shovels	0.3
Shoes	76
Short Clap?	5
Shot	386
Shovels, Shod	2
Shovels, Unshod	1
Sider	25
Silk Manufacture	107
Sives and Bottomes?	2
Skins, Baseel	0.4
Skins, Calf	1
Skins, Calf Tanned	56
Slate	1
Slowes?	6
Soap	5
Soap, English	55
Socieron?	50
Starch	8
Starch, English	12

	1671/2
Steel	1
Steel, Close	1
Steel, Gad	8
Stockings, Children's Worsted	0.3
Stockings, Irish	6
Stockings, Woollen	25
Stockings, Woollen Children's	3
Stockings, Woollen Men's	2
Stockings, Worsted	131
Sugar, English Refined	31
Table Boards	1
Tamy?	1
Thimbles	0.3
Tobacco	1
Tobacco Pipes	56
Tobacco Stems	3
Tombstones, Small	2
Tow Cards	6
Trenchers, Wooden	1
Trunks	7
Trym?	4
Virginals	2
Wares	2,093
Wares, Apothecary	48
Wares, Confectionary	7
Wares, Earthen English	1
Wares, Haberdashery	122
Wares, Lattin	0.3
Wax, Hard	1
Wax, Sealing	0.4
Whalebone	0.1
Whisks	1
Wood, Redwood	49
Wool Cards	75
Wool Cards, New	1
Wool Cards, Old	90
Woollen Cards	1
Worsted Frenge?	1
Yarn	4

Appendix 5.6

The Trade of Bristol's Importers from Greece, 1671/2 (in pounds sterling):[1]

Merchant Name	Greek Imports	Total Imports	Joined Merchant Venturers?	Colonial Imports	Continental Imports	Irish Imports
Edward Jones	6,084	6,302	1680	167	51	-
William Hayman	4,608	10,006	1665	5,100	120	178
James Hayes	4,608	4,608	No	-	-	-
Tymothy Parker	2,724	3,528	No	339	449	17
Thomas Ellis	2,580	2,982	No	402	-	-
William Willett	1,218	1,694	1647	476	-	-
John Sanders	780	7,289	No	6,506	-	3
John Jackson	174	488	1654	217	-	98
Archulas Indrereif	174	174	No	-	-	-
William Porter	108	716	No	608	-	-
Ann Doubting	95	369	No	244	30	-
Daniel Greening	62	62	No	-	-	-
Phillip Babican	62	62	No	-	-	-

[1] TNA PRO E190-1138/1; P.V. McGrath, *Records Relating to the Society of Merchant Venturers of Bristol in the Seventeenth Century,* Bristol Record Society Vol. XVII (1952), pp. 27-33, 261.